

Medical Alumni Bulletin

School of Medicine, University of North Carolina at Chapel Hill



JAN 11 2002

Is this really 'medicine'?

The controversial trend of complementary medicine



In light of recent events, I wanted my message to you to focus on how UNC is equipped to respond to possible terrorist acts. Myron Cohen, MD, chief of the division of infectious diseases and one of our foremost experts on the subject, shared this information with me. I wanted to pass it on to you.

Recent attacks on America, including use of the anthrax bacillus as a weapon of terrorism, have irrevocably changed the United States. How do these events affect the UNC School of Medicine? More importantly, what is the appropriate response of the school to these events? This is an opportune time to take stock of resources at UNC that could and should be deployed in our war against terrorism. Review of campus-wide activities in infectious diseases seems like a good place to start.

UNC has a long and rich tradition in teaching, clinical care and research in infectious diseases. Clinical activities in infectious diseases extend through North Carolina and globally. UNC Hospitals houses an Infectious Disease Clinic that offers care to more than 1,000 HIV-infected patients, as well as patients with a variety of other infectious diseases. UNC physicians offer patient care and conduct research at Durham and Wake County health departments, N.C. Central Prison and First Health of the Carolinas. UNC helps staff research clinics in Malawi, Madagascar, Beijing and Cameroon. The UNC research site in Malawi has nearly 100 employees, including several full-time UNC faculty and postdoctoral fellows. Many UNC medical students have participated in summer research projects in Malawi.

UNC receives more than \$20 million a year in federal support for infectious disease research. Major NIH centers on campus include the UNC Center for AIDS Research, the UNC/NIH STD Clinical Trials Unit, the UNC/NIH STI Cooperative Research Center and the UNC/NIH Fogarty AIDS International Training Program.

UNC also has a considerable research and training partnership with the Centers for Disease Control and Prevention, which includes several research and training grants, and a CDC Center for Public Health Preparedness specifically designed to recognize the emerging threat of bioterrorism.

Infectious disease research at UNC has flourished in large part due to extensive collaborations across the entire health science campus, with other universities and companies in the state, and with the N.C. Department of Health. These relationships and opportunities are now being coordinated in a School of Medicine Center for Infectious Disease, launched in May 2000.

The challenges raised by the attack of Sept. 11 are leading to rapid growth and evolution of the infectious disease activities at UNC-Chapel Hill. A group of health sciences faculty is developing a campus-wide course in civilian defense for January 2002, which will emphasize microbial agents of bioterrorism. UNC infectious disease, microbiology and public health faculty are already working with state and federal officials to deal with the immediate threat of anthrax and to prepare for the future. UNC faculty have developed a comprehensive proposal to develop a campus-wide program in civilian defense that builds on existing strengths in infectious diseases, microbiology and immunology and public health.

While the response to Sept. 11 has been lead at a federal level, success depends on local activities. North Carolina is widely viewed as better prepared for threats related to infectious diseases than many other states. In part, this must be ascribed to the strength of the program in infectious diseases on the UNC campus.

A handwritten signature in dark ink, reading "Jeffrey L. Houpt". The signature is fluid and cursive, with the first name and last name clearly legible.

Jeffrey L. Houpt, MD
Dean, School of Medicine
Vice Chancellor for Medical Affairs
CEO, UNC Health Care System

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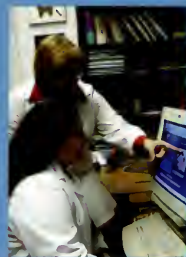
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The value of alternative medicine

Home remedies have been around as "the old wives" who espouse the. Now, the School of Medicine at UNC is slowly but surely finding ways to integrate complementary medicine into its curricula — and coming to terms with the controversy surrounding it. (cover photo by Brian Strickland)

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Heading down a **NEW ROAD**

How UNC is
addressing the
controversial
trend in
complementary
medicine

By Nell Yates

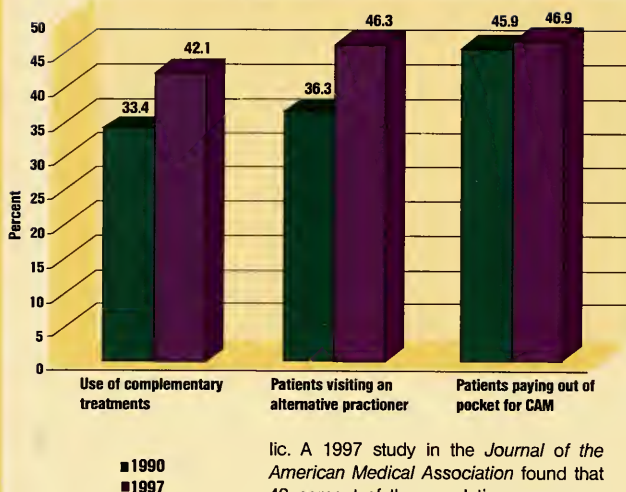
A registered nurse stands before a large class of UNC medical students, while a volunteer lies quietly on a massage therapy table. But the nurse, who specializes in stress and pain management, is practicing not massage therapy, but a treatment called "touch therapy," as he gently places his hand on the volunteer's feet, calves, back and other areas. In a soothing, singsong voice, he instructs the volunteer to focus on each area, relax and let go of her thoughts and stress. Touch therapy, he tells the students, often helps an anxious patient relax and put problems aside for the time being.

And so goes another lesson in complementary – or alternative – treatments at UNC.

Earlier in the semester the students learned about biofeedback, herbal medicine research, nutritional supplements, dietary treatments for cancer, traditional Chinese medicine, acupuncture and other therapeutic modalities in "Principles and Practices of Alternative and Complementary Medicine." The elective course is offered through the Program on Integrative Medicine in UNC's Department of Physical Medicine and Rehabilitation.

Complementary and alternative medicine (CAM), practices and techniques are drawing much interest among the pub-

CAM Trends 1990-1997



lic. A 1997 study in the *Journal of the American Medical Association* found that 42 percent of the population uses some sort of alternative therapies in addition to conventional medicine. And that year, Americans spent over \$10 billion out of pocket on complementary medicine. However, medical schools have traditionally eyed CAM practices with skepticism, all but ignoring some proven evidence-based approaches.

Now a \$1.6 million grant from the National Institutes of Health is placing the UNC School of Medicine in a leading role to study how to bring CAM education into mainstream medical school curricula.

"The idea is not to teach students how to practice this, but to explain evidence-based alternative practices. Complementary and alternative medicine has become a major part of health care but is not part of many medical schools," said Peter Curtis, MD, professor of family medicine and principal investigator for the NIH-funded research.

"Some medical schools take the attitude, 'We're doing medicine, not herbs,'" added Doug Mann, MD, professor of neurology and director of the Neurology department's Pain Program.

But medical schools are beginning to recognize that it is smart for physicians and other health care professionals to know about herbs and supplements and the benefits and risks they pose, especially since so many patients are turning to them on their own. These risks include the quality of herbals, interactions

with conventional medications and alterations of routine lab test results. The NIH grant will help UNC come up with safe, conscientious ways to present this material to students, ways that other colleges can use as a model, Dr. Mann said.

"In a way, we are training a new generation of physicians who may need to guide the patients regarding the treatments, risks and benefits of CAM. If physicians do not have any knowledge of CAM, where will the patients get reliable information?" said Michael Lee, MD, professor and chair of the Department of Physical Medicine and Rehabilitation.

The five-year grant targets specific areas in the School of Medicine and other UNC health affairs schools which administrators believe can benefit from educational efforts in CAM, including primary care, gastroenterology, cardiology, neurology, psychiatry and infectious diseases. CAM education also will be introduced to students by faculty in UNC's schools of Nursing, Dentistry, Pharmacy, Public Health and Allied Health. CAM education will be incorporated in the residency programs within the departments of Family Medicine, Neurology, Physical Medicine and Rehabilitation and Obstetrics and Gynecology. And finally, UNC faculty in all health professions will learn more about CAM education.

Because health curricula are already jam-packed, CAM education will be folded into existing lecture schedules or courses. For example, a course in pharmacology might include a lecture about herbal therapies, said Susan Gaylord, PhD, research assistant professor in the Department of Physical Medicine and Rehabilitation, director of the Program on Integrative Medicine and the grant's co-principal investigator.

Also, practicing physicians throughout North Carolina can learn more about CAM through seminars and workshops under the auspices of the Area Health Education Center (AHEC) program. Educational materials will include information on resources and the safety of complementary techniques and therapies.

Dr. Gaylord and others are weighing goals and completing a pilot of the faculty development program. Ten professors in different departments were

The fact that NIH sees this as a priority area and sees our school as having the strength to be a leader in developing education is significant.

— Cheryl McCartney, MD

recruited to be faculty leaders in learning about CAM therapies. They in turn will relay their knowledge to other experts and colleagues.

"The fact that NIH sees this as a priority area and sees our school as having the strength to be a leader in developing education is significant," said Cheryl McCartney, MD, executive associate dean for medical education. "One of the nice things here is our collaboration between departments."

Tackling new challenges

But Dr. McCartney said many challenges lie ahead in deciding exactly what to incorporate into the curriculum. "We have to think about the entire student body. What is the core information about CAM that all students need to know to be competent practitioners? How should we teach all students to inquire sensitively about their patients' use of CAM and to answer patients' questions? Students need to know the evidence for the safety of CAM, any interactions CAM has with conventional therapies, and the evidence for its effectiveness."

Already the Department of Physical Medicine and Rehabilitation has sponsored eight seminars on CAM education for residents and an elective course has been developed in Family Medicine, Physical Medicine and Rehabilitation and OB/GYN. A course is being developed in Neurology, as well, and a one-month rotation in CAM is now a requirement of OB/GYN residency.

The information that is taught is rich in history.

Herbs and other complementary treatments are as old as time itself, and most of the world's medicinal treatments do not come from drug stores. Up until the early 1900s, herbs and home remedies were the most prevalent medical treatment in the United States. The natural way was considered safer than treatments offered by most orthodox practitioners, who favored bloodletting, purging and use of mercurial nostrums, Dr. Curtis said. The turn of the century brought much medical progress, including the

development of bacteria-killing salvarsan in 1909, the first engineered drug. This gave birth to pharmaceutical research, and biomedicine entered its golden age.

It was many years later, in the 1960s, that a movement for holistic body and mind treatment became popular. The 1970s saw the first signs of concern over side effects of antibiotics and the quality of care by doctors. In this setting, a movement apart from formal medicine took hold and began to grow. This movement embraced natural herbs and mindfulness rather than pharmaceuticals.

Last year, according to Dr. Curtis, more than 620 million Americans visited CAM practitioners. Some patients are turning to herbal treatments because they believe they are getting natural, pure products. Others choose them because they feel they have more control over their bodies. Still others buy them because they are less expensive.

But there are serious safety concerns in part because the federal government does not regulate herbs and supplements unless a particular product proves hazardous. This is quite different in some European countries, such as France and Germany, where herbal remedies are regulated as drugs.

"Some of the products being imported here have serious contaminants. We don't know what we're getting," Dr. Curtis said. There is no standardization process or certification of quality. Perhaps just as alarming to health professionals is the issue of patients not disclosing to their doctors that they are taking herbs and supplements.

"Some patients are taking both conventional medicine and herbs. Some herbs affect liver enzymes that change the way conventional medicine works. They may be dangerous before surgery or they can change lab test results," Dr. Curtis said.

I, for one, am not going to eat weeds and seeds, and that's what a lot of these extracts are, in fact. One needs to read the literature on these herbal preparations and to realize all the potential side effects. One just doesn't know what one is taking.

— Ken Dudley, PhD

Recommended online resources

UNC's Health Sciences Library strives to help researchers find reliable, reputable sources of information. For the field of complementary medicine, librarians suggest these Web sites:

PubMed: <http://www.pubmed.gov>
MedLinePlus:

<http://www.medlineplus.gov>
National Center for Complementary and Alternative Medicine:

<http://nccam.nih.gov>
NOAH (New York online Access to Health)

<http://www.noah-health.org/english/alternative/alternative.html>

HerbMed: <http://www.herbmed.org>
Health Source on NC Live (available to N.C. residents)

If you need help from the Health Sciences Library, check the library's Web site, WWW.hsl.unc.edu /asklib or send an email to Asklib@med.unc.edu

Grant yields mixed reactions

Before the NIH grant application was submitted, medical school faculty responded to a survey about complementary and alternative medicine education. Most respondents felt that education and research on CAM was needed. But by all accounts, bringing CAM education to UNC will take much adjustment.

"There's a long history of skepticism. Many view (CAM) practitioners as quacks who exploit the public," Dr. Curtis said.

Ken Dudley, PhD, has taught pharmacology at UNC for nearly 35 years and is the director of the Medical Pharmacology course in the School of Medicine. When it comes to herbs and supplements, he has major reservations.

"I, for one, am not going to eat weeds and seeds, and that's what a lot of these extracts are, in fact," he said. "One needs to read the literature on these herbal preparations and to realize all the potential side effects. You need to take stock of the number of unknown components in these preparations. There are 1,500 different compounds in some of these preparations. One just doesn't know what one is taking. Much more research, such as NIH-supported clinical studies, is needed to support physicians' acceptance of the benefits and precautions of herbal preparations."

But Dr. Dudley knows herbs have attracted a huge following here.

"I want medical students to know that their patients are going to take these products, whether they like it or not. Patients can be just like kids. They're not always going to listen to you. Just don't get angry with them, and don't lose your patience," he said.

Dr. Dudley did admit to a positive experience with acupuncture. A physician friend, born in China, came to dinner one night. When Dr. Dudley complained about severe pain in his shoulder – he could barely raise his arm – his friend suggested he try acupuncture right then and there.

"He didn't have his needles with him so he used a sewing needle," Dr. Dudley recalled with a chuckle. But 45 minutes later Dr. Dudley was able to raise his arm, and after another treatment the next night, the relief lasted over two weeks.

Dr. Mann emphasized that CAM education at UNC will emphasize evidence-based information, though the lack of funding and research means that a

great deal of work needs to be done in the future to establish the effectiveness of CAM therapies.

"By ignoring the use of alternative medicine, the scientific community is missing out on valuable information, primarily whether these herbs and alternative medicines are effective or not," said Dr. Mann.

He became interested in acupuncture through his work in the headache field. He talked to CAM practitioners in the area who were doing acupuncture and researched their methods.

"Now we've built up a list of them. We've learned about both good and bad results," he said.

The NIH grant does not include funding for research projects. But a number of projects already in place are helping UNC faculty understand more about the effectiveness of complementary and alternative medicine. At the headache clinic, Dr. Mann and others are conducting acupuncture research on patients suffering from chronic daily headaches. At the N.C. Jaycee Burn Center, Michael Peck, MD, the center's director, and others are studying the effectiveness of acupuncture in relieving pain in burn victims. Along with Drs. Mann and Gaylord, John Winfield, MD, a UNC professor of rheumatology, and Jane Leserman Madison, PhD, a research associate professor of psychiatry, are collaborating on a study of whether mindfulness meditation can ease symptoms of fibromyalgia. Their work has paved the way for the application for another grant.

"Efforts in integrative medicine at UNC bring together the best of conventional and CAM therapies on behalf of good patient care," Dr. Mann said.

The Department of Physical Medicine and Rehabilitation appears to be an appropriate home for the NIH grant. In 1998, Dr. Lee approached the dean of the School of Medicine about starting the Program on Integrative Medicine within his department. He pointed out that patients in his field suffer from pain and other secondary conditions from spinal cord injuries, strokes, cerebral palsy and additional temporary or permanent physical disabilities. Dr. Lee knew of complementary techniques that seemed to help some patients.

However, Dr. Lee also is well aware that not everyone embraces CAM education at UNC.

"There's skepticism, but not

Some patients are taking both conventional medicine and herbs. Some herbs affect live enzymes that change the way conventional medicine works. They may be dangerous before surgery or they can change lab test results.

– Peter Curtis, MD

active resistance," he said. "I think people here are generally open. Students are asking questions and patients are asking questions. We're learning more as we go along and we are being as objective as possible. It is important to be aware of all options for patients and critical to know which may work and which will not. All CAM therapies or treatments are not equal in terms of efficacy and risks."

Jim Bryan, MD, a longtime professor of medicine and social medicine, is not enthusiastic about some complementary medicines and doesn't plan on using herbs. He believes medical students have enough to do already without ever learning how to practice CAM techniques.

"But the reality is, we need to teach students what these products are purported to do and what the problems are with interactions," he said. "Our for-bearers used herbs. The problem today is that we don't make our own herb mixtures. Most of us don't have herb gardens in our backyards."

Increased interest

Thomas Bacon, DrPH, AHEC program director and executive associate dean of the medical school, said there are an increasing number of queries about CAM from community physicians.

"There is no question that there is a lot of interest out there. Now we're responding to the interest," he said. "This grant will increase expertise and knowledge and allow us to disseminate information."

In addition to doctors, AHEC resources will be available to nurses, pharmacists, allied health workers and dentists. Last year, AHEC sponsored about 1,500 programs attended by about 150,000 participants.

The university's Health Sciences Library continues to be an important resource to health professionals, as well as patients, seeking information on complementary and alternative medicine. The library also has seen increased interest. For example, a medical student wanted to learn about acupuncture or which herbs might help a patient on dialysis. And a dental student tried to find articles on herbal medicine in the treatment of periodontal disease.

Health Sciences librarians steer researchers to evidence-based and reliable sources, said Lisa Rae, the library's director of development and communications. "We certainly don't determine treatment. We point to the research. We go through the full extent of what we have at our disposal, which is a lot, and help people narrow down their search."

She pointed out that the Internet can be a bewildering – and, perhaps, even dangerous – place for those looking for complementary and alternative medicine information.



Terry and Joe Graedon of The People's Pharmacy

"People should ask, 'Is the site commercial?' 'Is it trying to sell me a product?' 'Do I want to look at the latest hot and exciting news?' 'Do I want to look at people's personal experiences?' Probably what you really want is to identify good sources of information with good research on the product," Rae said.

Not long ago, a large crowd gathered to hear Joe and Terry Graedon of The People's Pharmacy fame at the UNC Health Care Women's Health Fair. Over the years, the couple has attracted a large following with their books and National Public Radio syndicated program on herbal and home remedies. Among them is Lois Kirkwood of Chapel Hill, who has been interested in herbs and home remedies. Raisins soaked in gin seemed to recently improve her husband's arthritis, she said sheepishly.

"I think medicine needs to broaden its scope," she added.

Her friend Harriet Erickson, also of Chapel Hill, said herbs and complementary and alternative medicine will never take the place of conventional medicine but she feels many herbs can be effective. However, she is worried about dangerous interactions.

The Graedons, whose first book, *The People's Pharmacy*, appeared in 1975, said interest in herbs and home remedies is "amazing."

"It feels nice to know your instincts were right," quipped Joe Graedon, who wondered if "the old wives were right and whether scientists are finally catching up with what grandmothers knew . . . People are taking lots of herbs. Medical schools exist to educate students, and with the grant, UNC is at the front of this process."

Nell Yates is a freelance writer who has covered medical issues for several publications. She lives in Wake Forest. 

Pursuing a childhood dream

Neurology chair transforms brotherly concern into a career that improves ways patients do 'things that are most important in life'

By Rebekah Butler

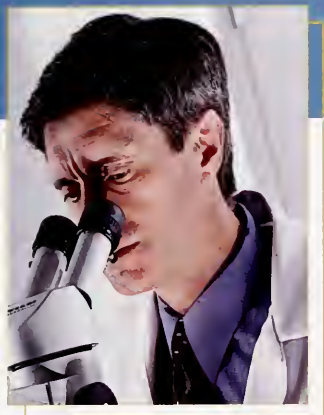
It was not just his sister having cerebral palsy, but a combination of influences that shaped the desire of Frank Longo, MD, PhD, to pursue medicine. Now, much like his career was shaped, Dr. Longo gets to shape the vision of the Department of Neurology as its new chair.

Dr. Longo joined the School of Medicine's faculty last July. He was recruited to come to UNC after working at the University of California at San Francisco for 17 years. He accepted the position because of the opportunity he saw to integrate clinical treatment with basic science. "I also thought that UNC had tremendous potential to really develop a top-tier neurologic program," he said.

In Dr. Longo's short time at UNC, he has already worked to expand the Sleep Disorders Program as well as the Epilepsy Program. He also has begun development of a Movement Disorders Clinic, which he hopes will be similar to a program he developed at UCSF that is now one of the largest movement disorders programs in North America. Finally, he also is working to develop a comprehensive stroke program since North Carolina is in the nation's stroke belt.

Photos by Jay Mangum





Frank M. Longo, MD, PhD

Education: University of California at San Diego, BA, MD, PhD

Wife: Anne

Children: Sophia

Personal Interests: snow skiing, running, bicycling

Some of Dr. Longo's goals include adding faculty, putting a new spin on teaching and making the residency training program the best in the United States.

To add to his faculty, Dr. Longo will work to acquire endowed professorships and fellowships. "Philanthropy opens the door to creating new cutting-edge services for patients and sets the stage for breakthroughs for so-called untreatable neurological disorders," he said.

Dr. Longo said he wants to make teaching as enjoyable as possible for both professors and students. "We need to make sure our students do not have the outdated view that neurological problems can't be solved and teach them about exciting, cutting-edge treatments."

He believes the expansion and development of programs naturally will contribute to his lofty goals for residency training. He also believes that the recruitment of clinicians with a passion for high-quality care and evidence-based care will play an important role.

"Dr. Longo has the ability to see problems in a clear manner and to plan for their resolution in a way that augments the overall vision he has for departmental development," said Colin Hall, MD, professor of neurology and medicine and former interim chair of Neurology.

Dr. Longo was born in Ontario, Canada, but has lived in the United States since his parents moved the family to Los Angeles when he was 2. He first realized he wanted to become a physician at age 5, when

his younger sister's battle with cerebral palsy influenced him. "I remember wondering why the doctors couldn't make my sister walk," he recalled.

Other influences steered him toward medicine. His mother was a nurse, and she frequently had nursing books in their home. "I recall even at the age of 7 thinking the images from those books were the most interesting thing I had seen," Dr. Longo said.

A love of science also guided him. "During elementary and high school, science was always my favorite subject. So when I went to college, science felt natural with the goal to go to medical school," he said.

Dr. Longo also learned about business from his father, who taught him principles he would later use in leadership positions. The senior Longo worked as a used car salesman after the family moved to the United States with the dream one day to own not only his own dealership, but also the largest dealership in the world.

His father accomplished his goals, and along the way Dr. Longo's father made his son learn every aspect of the business, from selling cars to repairing them. Doing all these jobs taught Dr. Longo how to build and maintain a successful business, which has been valuable knowledge for him as a doctor. "A lot of what we do in medicine is put programs together, and they have to run well," he said.

With his firm understanding of business and his desire to be a physician, Dr. Longo went to the University of California at San Diego for his undergrad-



Dr. Longo, center, speaks with former Dean Stuart Bondurant, MD, left, and William D. Snider, MD, outside the new Neuroscience Research Building.

“Dr. Longo has the ability to see problems in a clear manner and to plan for their resolution in a way that augments the overall vision he has for departmental development.”

**Colin Hall, MD,
professor of neurology
and medicine**

uate degree because of the school's excellent reputation in the basic biological sciences.

He continued at UCSD for medical school. During his first year of medical school, Dr. Longo decided he wanted to go into neurology, a decision that solidified when he took a course with a professor who was trying to solve regeneration of the nervous system. “I realized during this course that any small contribution a person could make to neurology could help a lot of people,” he said.

After completing medical school, Dr. Longo went on to get his PhD, also at UCSD. “I pursued my PhD after medical school because I wanted more training in basic science. I very much enjoyed basic science, and I saw how a deep understanding of it could solve clinical problems,” he explained.

Dr. Longo's clinical and research specialty is neurodegenerative

diseases, specifically Alzheimer's and Huntington's disease. “Studying these two diseases is very exciting because it is a glimpse into the future of neurologic medicine,” he pointed out.

Dr. Longo is a nationally recognized expert in his field, according to Dr. Hall. “He believes our role is to develop programs which address issues from the test tube through to clinical treatment. He also understands the crucial value of interaction in the scientific community, and is reaching out to other groups in an effort to develop the research collaboration which has previously been lacking.”

“Neurology is so important, because even if all the systems in the body are working well, our ability to do the things that are most important in life — to spend time with our family and friends, to perceive life — requires that our nervous system is working appropriately,” Dr. Longo said. 

Special Events



School of Medicine Dean Jeffrey L. Houpt, MD, right, chats with Myron Cohen, MD, chief of the division of Infectious Diseases and director of the Center for HIV/STDs and Infectious Disease, left, and U.S. Rep. David Price at the UNC World AIDS Day Symposium in November in Chapel Hill. The daylong meeting, hosted by UNC Center for AIDS Research, brought together national and international experts in HIV/AIDS vaccine development, treatment, prevention and behavior. Also, Price announced the renewal of the UNC center's NIH CFAR grant – \$8 million over five years.

Family Day²⁰⁰¹

A record crowd of medical school students, family and friends enjoyed Family Day activities Sept. 29 in Chapel Hill.

Family Day is an informative daylong event for all medical school parents wishing to learn more about the medical school experience, culminating in the White Coat Ceremony for first-year students.

School of Medicine Dean Jeffrey L. Houpt, MD, welcomed the more than 500 guests. Georgette A. Dent, MD, associate dean for stu-

dent affairs, shared valuable information on what to expect in medical school, while Cheryl F. McCartney, MD, executive associate dean for medical education, moderated the student panel portion of the program. Jordan J. Cohen, MD, president of the Association of American Medical Colleges and White Coat Ceremony keynote speaker, shared his perspective, too.

Following lunch on the lawn at the Carolina Inn, first-year students and their families adjourned to Memorial Hall for the traditional White Coat Ceremony.

The White Coat Ceremony fosters the ideals of humanistic, compassionate patient care, ethical conduct and personal responsibility in the learning of medicine.

UNC held its first White Coat Ceremony in 1996. This year, 165 first-year medical students received their coats during the ceremony before a standing-room only crowd.



All photos by Jay Mangum

The entrepreneur

Alum relishes his roles in patient care and medical innovations

By Bernadette Gillis

"Fund-raiser," "inventor" and "entrepreneur" may not be words used to describe most physicians, but most physicians are not like Kevin R. Stone, MD, '81.

In addition to practicing at his sports and arthritis clinic, Dr. Stone runs a public non-profit foundation and is the founder, chairman and chief executive officer of two private, venture capital-funded companies. He also has U.S. patents for more than 40 medical devices.

Dr. Stone's motivation for starting businesses and designing patents has little to do with financial gain. An orthopedic surgeon in San Francisco, Dr. Stone said he values research just as much as patient care, and he has successfully found a way to merge the two.

"What I've been able to do is combine a clinical practice with a research career without being at a formal university setting and without having formal teaching responsibilities," he said. "That has permitted me to focus my working life on clinical practice and research."

The clinical aspect of Dr. Stone's work centers around his practice, The Stone Clinic, which he founded in 1988 and focuses on knee and shoulder care and research. Dr. Stone sees patients with sports injuries and those who have arthritis and wish to continue active lives. He also has worked with professional athletes, helping them with rehabilitation and pre-season conditioning.

The Stone Clinic has provided Dr. Stone with the environment to develop two start-up companies, including Joint Juice Inc., which produces a health drink by the same name.

Dr. Stone came up with the concept of Joint Juice after several of his patients began requesting glucosamine. He learned that research had shown that the supplement was effective in rebuilding cartilage, protecting joints and reducing joint symptoms for patients with arthritis. Glucosamine was making a difference in many of his patients' joints, but it was difficult for many of them to take.

"The patients hated taking the three large horse pills," he pointed out. "And there were so many of these patients that my colleagues and I decided it would be a good contribution to the world if we could figure out a way to make glucosamine better tasting or to make a more acceptable way of taking it."

So Dr. Stone developed Joint Juice, which is slightly carbonated and contains a full day's dose of glu-

cosamine. The drink is not only available to Dr. Stone's patients, but the product is also for sale throughout Northern California, Seattle and Portland and on the Internet.

Dr. Stone's other business is called Cross Cart Inc., which is a private orthopedic device company he founded in 1996 to develop, manufacture and commercialize tissues derived from pigs.

"We asked why we couldn't use pig tissues to rebuild torn ligaments in people's knees, and the answer was that they were rejected," he said. "And we wondered if we could identify the cause of rejection. We did that, and we designed a method of stripping away the antigens from the pig tissues to permit it to be used as a knee ligament reconstruction device and not be rejected. We expect to start research on humans this year."

If successful in people, the technology will save patients pain and lengthy rehabilitation.

Dr. Stone said his start-up companies and research have been quite successful; however, he realizes that without private funding, none of it would be possible.

"I've been able to raise the funding to support that research privately by working on things that would have a huge clinical benefit and also a large commercial benefit. It also was exciting to people who invest in these sorts of things."

The Stone Foundation for Sports Medicine and Arthritis Research has allowed Dr. Stone to come up with the much-needed funds to support his clinical, noncommercial research endeavors. "I developed the foundation to evaluate the clinical techniques we were developing, particularly in cartilage regeneration, to help athletes learn new training techniques, and to help fellows and residents learn new surgical techniques."

One of the studies that The Stone Foundation sponsors is of articular cartilage paste grafting. Ten years ago Dr. Stone and his colleagues designed the technique,



Dr. Stone (light blue shirt, back row) and his team pose atop The Stone Clinic in San Francisco.

Photos courtesy Dr. Stone



Kevin R. Stone

Birth date: June 4, 1955

Hometown: Providence, R.I.

Wife: Susan

Children: Jennifer, 12, and Julianna, 10

Personal Interests: Windsurfing, biking, skiing and driving to work on his motorboat under the Golden Gate Bridge

which assists the re-growth of articular cartilage inside the knee in arthritic patients. The technique involves taking the arthritic area and stimulating new blood flow to it and paste grafting it.

"This technique has permitted a number of patients to return to sports," he said. "And it also has allowed them to avoid or delay total joint replacement."

Dr. Stone's career as an orthopedic surgeon has gone beyond his work with The Stone Clinic and The Stone Foundation. He also has worked as an orthopedic surgeon for the U.S. Ski Team from 1988 until 2000. "I enjoyed traveling with them each year, covering racing or training camps."

Some of Dr. Stone's other volunteer efforts have included working as a physician for the Smin Ballet and other dance organizations. "We take care of several ballet companies here in San Francisco and work with the different dancers to help them combine the artistry of dance with the real athleticism of ballet."

Even with all of the work Dr. Stone has done in orthopedics, it may be a little surprising to learn that he wasn't always sure he wanted a career in medicine. He actually majored in government as an undergraduate at Harvard University. An avid sports lover, Dr. Stone suffered a knee injury while playing soccer there. Because of the positive experience he had with his orthopedic surgeon, he decided then that he would become an orthopedic surgeon.

"I was able to identify with him as a role model. I was inspired by the role that he played with athletes. I just knew that was what I wanted to do."

This decision led him to UNC.

"When I interviewed there I was admitted to half a dozen medical schools and decided UNC had the best combination of a southern cultural education — which a Harvard education didn't offer — as well as an excellent medical education," Dr. Stone said.

He also said opportunities for travel attracted him to UNC. At the time, medical students were allowed to spend some rotations in their last two years of school studying in other parts of the world. Dr. Stone studied obstetrics in London, orthopedic surgery in Lake Tahoe and at Harvard, dermatology in New York, cardiology in Rhode Island and general surgery at the University of California in San Francisco.

"I liked having the opportunity to test out other medical environments while I was still in medical school," he said.

Dr. Stone's education and experiences at UNC laid the foundation for a successful career in orthopedics. He said he is happy with the results of his research and business. And, he said he is driven by a desire to make a difference in the world and in the lives of his patients.

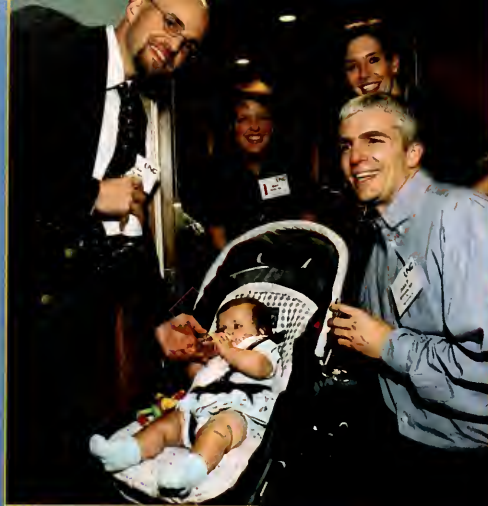
"I love combining the ability to take care of patients one-on-one each day with conducting clinical care, and because of the research, knowing what we're going to be able to do for them today and then what we'll be able to do for them in the future. And I also enjoy working on things that will have a huge contribution to a lot of people's lives." 



Joint Juice, one of Dr. Stone's business endeavors, provides glucosamine to arthritic patients in an easy-to-take and tasty way.

Photos by Brian Stockland

Fall Medical Alumni Weekend





Fall Medical Alumni Weekend

Fall Alumni Weekend in October was well attended and very successful.

The Continuing Medical Education program included lectures by staff from the Health Sciences Library and by Bob Berger, chief information officer for the UNC School of Medicine. Guests appeared to appreciate a workshop using computers to access medical education.

Alumni also were invited to the opening of an art exhibition of the works of Dr. Frank Netter, a noted medical illustrator. His daughter, Francine Netter Carlson, provided many of the items shown in the exhibition.

The banquet in the Alumni Hall included student Faculty Fund Scholars and many of the alumni responsible for providing funds for these deserving students.

Following messages from Dean Jeffrey Houpt and Dr. David Meredith, the new chair of the Department of Ophthalmology, guests enjoyed a barbecue lunch.

The weekend culminated with the UNC-ECU football game, providing excitement for the completion of a successful weekend.



an artistic endeavor

Esteemed collection of medical drawings, donated to UNC's Health Sciences Library

By Rebekah Butler

The medical illustrations of Frank H. Netter, MD, have long helped medical students understand the human body. Now UNC students and the community have the opportunity to take a further glimpse into Dr. Netter's work, because of a generous contribution by his daughter.

A physician and artist, Dr. Netter has been recognized internationally as one of the foremost medical illustrators of the 20th century. In celebration of her father's work, Francine Netter Carlson of Chapel Hill gave the UNC Health Sciences Library her own personal collection of his work. "I donated my father's work to the library because I wanted it to be available for research and posterity," Ms. Carlson said.

Donated last year, the collection illustrates the research process Dr. Netter conducted to complete his drawings. It includes research notes, sketches and correspondence.

Ms. Carlson gave the collection to UNC's Health Sciences Library because of her family's connection to the university. Ms. Carlson's mother, who like her father was a physician, graduated from UNC's School of Medicine. Ms. Carlson herself received her master's in business administration from UNC, and her daughter, Caroline, is pursuing her master's in public health. In addition, Ms. Carlson's proximity to the library keeps her father's work close to her.

To give students, faculty, alumni and the community

the opportunity to see a portion of the collection, an exhibit called "Legacy of a Lifetime: The Medical Illustrations of Frank H. Netter, MD," was held Oct. 6-Dec. 31.

Interest in the exhibit was significant, extending beyond UNC's campus to the larger Chapel Hill community, according to Lisa Rae, director of development and communications for the Health Sciences Library. Frequent users of the library viewed the exhibit while just passing by, while other individuals and groups visited the library specifically to view it. Every time I went out of my office there was someone looking at it or reading it," said Ms. Rae, whose office is directly by the exhibit.

Beyond the reception and the exhibit, a discussion about the collection, Dr. Netter and the impact of his work was held in December. Sponsored by the Health Sciences Library and the School of Medicine's student-run Bullitt History of Medicine Club, the discussion was led by Ms. Carlson and her daughter as well as Marshall Runge, MD, PhD, chair of the Department of Medicine, and Craig Luce, a medical illustrator who worked with Dr. Netter.

"I saw the exhibit bring about such insightful discussion among students and thought, 'This is what the exhibit is all about,'" Ms. Rae said.

Dr. Netter combined his love of art with his knowledge of medicine to create his famous illustrations of the human body. Born in 1906 in Brooklyn, N.Y., Dr. Netter studied

at the National Academy of Design in New York City and at the Art Students League. At his mother's urging, Dr. Netter attended medical school. While in medical school, Dr. Netter worked as a commercial artist and illustrator of medical books.

In 1933, the depth of the Great Depression, Dr. Netter went into the private practice of surgery but continued to draw to supplement his income. As he began to spend more time drawing, he gave up his practice to become a full-time artist.

Having done several advertisements for CIBA Pharmaceuticals, Dr. Netter was hired by the company in 1938 to illustrate a heart for use in advertising the drug Digitalis. The



Frank H. Netter, MD



Photo by Rebekah Butler

The exhibit "Legacy of a Lifetime: The Medical Illustrations of Frank H. Netter, MD" was a popular attraction at UNC's Health Sciences Library last fall.

drawing opened to reveal the intricacies of the heart inside. This foldout heart became a widely used teaching tool for physicians of the era and led to a series of anatomy and pathology illustration projects that became Dr. Netter's life work. Dr. Netter illustrated all 13 volumes of the CIBA Collection, covering the anatomy and pathology of the entire human body.

'I saw the exhibit bring about such insightful discussion among students and thought. This is what the exhibit is all about.'

Lisa Rae

Dr. Netter spent far more time researching each illustration than he spent painting it. He did whatever was necessary to understand each project, including attending surgeries. "The making of pictures is a stern discipline. One may 'write around' a subject where one is not quite sure of the details, but, with brush in hand before the draw-

ing board, one must be precise and realistic," Dr. Netter once pointed out.

In 1989, a compilation of Dr. Netter's work appeared in the Atlas of Human Anatomy. Dr. Netter died in 1991. Since his death, his work has been published on CD-ROM, meeting the needs of today's technology.

In recognition of Dr. Netter's legacy, several awards have been established in his name including the Vesalius Trust Frank Netter Award for Special Contributions to Medical Education and the Frank Netter Arts Competition for Medical Students.

Ms. Carlson also established the Frank H. Netter, MD, Memorial Endowment to support library services enhancing access to medical knowledge.

"Thanks to the generosity of Ms. Carlson and her family, the Health Sciences Library is able to enrich the educational experience for students, faculty and the community. The exhibit reinforces the value of our history of the health sciences — our foundation as we advance toward the future of medicine and health knowledge management," Ms. Rae said. 

No regrets

Fuller Award recipient relishes role of service
and is happy with his **career choices**

By Rebekah Butler

Stanley Mandel, MD, executive associate dean for clinical affairs and chief of staff of UNC Hospitals, is not a person encountered everyday. Unlike most, this year's recipient of the H. Fleming Fuller Award can hardly think of one thing he would change about his life.

A native of New York City, Dr. Mandel got the desire to move to the South while an undergraduate at Columbia University. Though he only applied to southern medical schools, Dr. Mandel had a difficult time convincing them that he truly wished to attend medical school in the South. His persistence paid off, though, and he attended the University of Virginia.

Once Dr. Mandel moved to the South he never left, living here now for more than 40 years. His dedication to UNC has been as strong as his dedication to the South. After completing his medical training, Dr. Mandel joined the School of Medicine's faculty in 1969 and has remained at UNC ever since.

Dr. Mandel has served in different capacities for both the hospitals and the School of Medicine during his more than 30 years of service. Beginning his career in the Department of Surgery's division of vascular surgery, Dr. Mandel established UNC Hospitals' kidney transplant program, which provided the foundation for the comprehensive transplant programs that exist there today. He has served the last 13 years in administration as executive associate dean for clinical affairs and chief of staff, all the while maintaining a clinical practice.

In recognition of Dr. Mandel's service, he received the Fuller Award, which honors dedication to patient care, teaching and community service. Dr. Mandel said he chose medicine because of its elements of service and teaching. "Medicine held for me the combination of clinical science, service to others and teaching. I had originally

***'Medicine held for me
the combination
of clinical science,
service to others
and teaching.'***

Stanley Mandel, MD



Photos by Jay Mangum

Stanley Mandel, MD

started out wanting to be a chemistry teacher, but it did not have the human element," he said.

Throughout his medical career, Dr. Mandel has remained true to what originally attracted him to medicine, teaching students and residents and serving others, including the community.

As a teacher, Dr. Mandel has tried to teach students competency, communication and caring.

"Teaching competency is easy because students are already competent when they get here, and you can teach them communication, but you cannot teach them caring. You have to set an example and be a role model," he said.

"As a physician, Dr. Mandel has been an exemplary role model for generations of physicians at UNC," said Ed Norfleet, MD, professor and executive vice chair of the Department of Anesthesiology.

Dr. Mandel's dedication to patient care is seen not only in the values he has tried to instill in students,



Dorothy Fuller, widow of Dr. Fuller, and her son Lyndon, unveil a portrait of the award's namesake.

but also in his work establishing the clinical transplant program. He came to UNC with the understanding that he would help develop the clinical transplant program. His work with transplants, however, started much sooner than he anticipated, when three days after his arrival he performed UNC's first successful kidney transplant.

Additionally, Dr. Mandel said his dedication to patient care came from his own experience as a patient. "I've been a patient and that taught me a lot about what it means to be a good doctor," he said.

"Wisdom, maturity, competency, integrity, commitment and compassion describe Dr. Mandel's approach to medicine. He develops and nurtures a patient-physician bond which patients and their families fondly remember," Dr. Norfleet pointed out.

Dr. Mandel also has dedicated himself to community service by participating in committees on the local, state and national levels. Much of his commitment to community service has centered around his work with organ transplantation. He has served on the board of trustees for the Triangle Kidney Foundation and been president of both the Carolina Organ Procurement Agency and the Southeastern Organ Procurement Agency.

He said he was astonished when he found out he had won the H. Fleming Fuller Award.

"I had served on the Fuller committee, and I had participated in the selection of prior recipients, but I never thought it would be something I'd get. I knew I had been nominated, because they asked me not to participate in the selection. I thought to myself, 'Well, you're in some

company now.' To be recognized by your colleagues and peers is a great form of meaningful recognition."

The Fuller Award is a permanent memorial to Dr. Fuller, who was a physician in Kinston. A founding member of the board of directors of N.C. Memorial Hospital, Dr. Fuller served on the board from 1971 until his death in 1986.

Dr. Mandel was given the award at a banquet Nov. 16, during which a portrait of Dr. Fuller was unveiled.

Two years ago, Dr. Mandel went into phased retirement, working only half time. In July he will fully retire from UNC and do all the things he enjoys, such as spending a great deal of time salt-water fishing.

Dr. Mandel not only enjoys fishing, but also claims he is an experienced fisherman. Dr. Norfleet, however, must know something to the contrary: "Despite his fishing stories, Stan rarely catches fish. Before he goes home from fishing, he stops by the fish market in Morehead City, takes some pictures, and buys fish to take home."

Looking back, Dr. Mandel said, "If I had my life to live over again, the pathways I took would be the same. I would go to UVA, come to UNC and spend the last third of my career in the Dean's Office and as chief of staff for UNC Hospitals." 



The event's guests gather at The Kenan Center.

Into the 21st century

The ancient method of teaching anatomy takes a bold leap with present-day technology

By Rebekah Butler

Anatomy, the course many medical students consider boot camp for medical school, has been taught essentially the same way since the publication of Vesalius' *De Humani Corporis Fabrica* in 1543. Now, two professors, with a grant from the Department of Education, are developing an anatomy Web site, incorporating technology into the age-old study of the human body.

Noelle Granger, PhD, and O.W. Henson, PhD, professors in the School of Medicine's Department of Cell and Developmental Biology, have been working for several years, with university grants, to incorporate electronic materials into the anatomy course taken by first-year medical students. Their reason for creating the electronic, supplemental materials for the course is simple — they want to provide students additional and more effective ways to approach the study of anatomy.

Anatomy, with its major emphasis on dissection, lays the basic foundation for virtually everything medical school students study during their four years in medical school and beyond. However, over the past several decades, instructional time in anatomy has been significantly reduced at most U.S. medical schools.

"The students are expected to have a broader basis of knowledge, and in many new areas, so time has had to be taken from the traditional courses, such as anatomy, to accommodate the teaching of these new areas," Dr. Granger said.

Because of the loss of curricular hours and requests by medical students to view a dissection before having to do it themselves, Dr. Granger and other anatomy faculty recognized a need to provide students with additional preparatory resources. Then, in fall 1998, when an anatomy graduate student, Jennifer Burgoon, made two online videos of a foot dissection, Dr. Granger realized how to provide students these resources.

Dr. Granger applied for grants from the School of Medicine's Office of Information Systems to begin making additional videos. By fall 1999, six dissection videos were available for viewing through the course's online syllabus. The videos, which averaged 10 minutes each, included sequential steps with voiceover instructions, the objectives for each step and the identification numbers of relevant plates in Netter's *Atlas of Human Anatomy*, with a link to the atlas.

"The response of the students to these first

videos was so positive that we decided to continue making the videos," Dr. Granger said. Since then, dissection videos for all but five of the dissections in the fall semester of the course have been added to the online syllabus.

Around the same time Dr. Granger was beginning her work, Dr. Henson initiated a different project. His project involved using images from the National Library of Medicine's *Visible Human Project*, an enormous database of sequential digital images spaced every 0.3 mm through one male and one female cadaver.

While the university was able to download the images for free, Dr. Henson received a UNC Chancellor's Technology Award totaling \$49,999 to support the collection of the images and the development of software to manipulate them. Dr. Henson's work has resulted in QuickTime movies of body regions that resemble computerized tomography and magnetic resonance imaging.

Students now have access to QuickTime movies of sectional images of the thorax, abdomen and pelvis through the course's online syllabus. "With the use of CTs and MRIs today, it is imperative that students have a sound knowledge of sectional anatomy and image interpretation. We hope students will gain this knowledge by our linking of sectional anatomy to their dissecting experience," Dr. Henson said.

Dr. Henson also used data from the *Visible Human Project* to create a three-dimensional simulated radiographic display of the bones of the shoulder girdle. This can be rotated on a computer screen, helping students understand the changing appearance of a radiograph as it is viewed from different angles, with one area superimposed on another.

'I am excited to be
an integral part of an
advancement in
anatomical instruction
from its preliminary stages
to the final product.'

Jennifer Burgoon



Noelle Granger, PhD, standing, and Jennifer Burgoon demonstrate features of the new technology they devised to teach medical students aspects of anatomy.

Students had the same positive response for the sectional images and radiographic displays as they did for dissection videos. Dr. Granger and Dr. Henson wanted to continue their work, but they did not know where to turn for funding.

Last winter, Ms. Burgoon, the graduate student who had made the first dissection videos, received a description of educational grants awarded by the Department of Education's Fund for the Improvement of Post-Secondary Education (FIPSE) and brought it to Dr. Granger's attention.

After submitting their proposal, the group was notified they had received a three-year grant for slightly less than \$500,000, one of only 5 percent funded from the applicant pool. The grant allows Dr. Granger and Dr. Henson to not only complete work already started, but also to develop a Web platform for resources that can be accessed by a variety of students studying anatomy in health sciences across the country. "We are particularly excited that the resources developed with the support of this grant may be useful in a variety of settings — nursing and dental schools and osteopathic medical schools, for example, as well as in physical therapy and occupational therapy programs and even

in post-graduate medical courses," Dr. Granger said.

With the funding, Dr. Granger and Dr. Henson will create a Web site similar to the School of Medicine's online anatomy syllabus. The site will contain the dissection videos presented as modules, with references to Netter's *Atlas of Human Anatomy*, and linked to the relevant sectional images and three-dimensional radiographic displays.

Once completed, the site will contain 37 dissection videos, divided into four to eight modules per dissection, with corresponding sectional images. Three-dimensional radiographic displays will be provided for the shoulder as well as the lumbar and cervical vertebrae, wrist, ankle, pelvis and ear.

Although the project will develop under the direction of Dr. Granger and Dr. Henson, an advisory board made up of four members will help oversee the project. Two of the advisory board members are from UNC's School of Medicine, one is from Dartmouth Medical School and another is from Morehouse School of Medicine.

Ms. Burgoon, who earned a master's degree in Cell Biology and Anatomy this past August and is now pursuing a doctoral degree in UNC's School of Education, gets to work on the project she initiated, serving as the grant coordinator and research assistant. Her thesis research will derive from the grant project. "I am excited to be an integral part of

an advancement in anatomical instruction from its preliminary stages to the final product," she said.

The Web site will be completed in segments by Oct. 31, 2004, with the aim to have a portion of it operational by next fall so students can begin evaluating it.

Besides the board members from Dartmouth and Morehouse, faculty members from the University of Virginia School of Medicine and Southern Illinois University School of Dental Medicine, among others, have agreed to use and evaluate the Web site in their anatomy courses.

Dr. Granger and Dr. Henson will inform other educators about the Web site through professional conferences and associations. Anyone studying anatomy in the health sciences can use the Web site.

While Dr. Granger and Dr. Henson are excited about the potential of their Web site to help health sciences students better understand anatomy, they do not want the site to replace dissection. "This Web site is not being designed to replace dissection. Laying hands on the human body is a very important part of the training and education of a physician-to-be. I would never want a physician to treat me who had learned his or her anatomy solely on a computer," Dr. Granger said. 

'A center of gravity for neuroscience research in Chapel Hill'

New Neuroscience Research Building dedicated

By Leslie H. Lang

The official dedication ceremony for the Neuroscience Research Building occurred Oct. 11, a glorious fall afternoon.

That same morning, neuroscientists from institutions locally and nationally had assembled at the Carolina Club for the Second Annual Neuroscience Symposium, sponsored by the UNC Neuroscience Center, directed by William D. Snider, MD.

At about 3 p.m., several dozen people from that intellectually charged meeting joined an audience of more than 250 additional guests. So when Jeffrey L. Houpt, MD, dean of the School of Medicine, rose to call the meeting to order and introduce the platform guests, it was to an expectant and especially responsive crowd.

Guest speakers included the state Sen. Howard N. Lee of North Carolina's 16th District; Frank Longo, MD, PhD, chair of the Department of Neurology; the event's keynote

The UNC Neuroscience Center

The UNC Neuroscience Center is an interdepartmental research center. Its mission is to promote neuroscience research with specific emphases on brain development, neurogenetics and neurological disease. The center originated as the biomedical arm of the UNC Mental Retardation Research Center, founded in the 1960s by Dr. Morris Lipton.

In 1996, the center was given its current name by the board of governors, and its mission expanded to include areas of neuroscience. The center is organized into research working groups that reflect the most rapidly advancing areas of neuroscience research. Each working group includes researchers with both basic and disease-related interests.

The goal is to make breakthroughs in key areas that are most likely to impact the neurological and psychiatric disorders so devastating to individuals and their families.

speaker, Dr. Snider, professor of neurology and cell and molecular physiology; and James Moeser, PhD, chancellor of UNC-Chapel Hill.

In his overview of the new building, the dean noted that roughly half of the funds for construction came from UNC Hospitals, in exchange for the site – formerly occupied by the school's Biological Sciences Research Center building – that was required for the new N.C. Women's and Children's Hospitals.

The remaining funds needed to build and equip the structure came from multiple sources, including construction grant funds from the National

Institutes of Health; a significant grant from the Keck Foundation to assist with the Animal Models Center envisioned by Oliver Smithies, PhD, excellence professor of pathology and laboratory medicine; and major revenue bond assistance from UNC-Chapel Hill.

"Also, by authorizing this important building, the North Carolina General Assembly helped immeasurably by assuring a long-term, continuing source of support for its

basic operations and upkeep," Dr. Houpt added. "By means of this varied package of financing, we now find ourselves in position to bring on line nearly 35,000 assignable square feet of research and research support space on five floors of the building. It also provides our investigators with two floors of state-of-the-art space to properly house the laboratory animals, principally genetically-modified



Former Dean Stuart Bondurant, N.C. Sen. Howard Lee, Chancellor James Moeser, William Snider, Dean Jeffrey L. Houpt and Frank Longo cut the dedication ribbon.

Photos by Jay Mangum



James R. White

mice, so vitally important to this work."

The UNC Neuroscience Center is in the top two floors. On the sixth floor are the Departments of Neurology and Ophthalmology, the fifth houses vascular biology and on the fourth is the Department of Genetics. Administrative offices are on the third floor.

In his remarks, Lee stressed his continued support for the university's need for improved and expanded space. He also pointed to UNC-Chapel Hill's creative public and private partnership approach to funding.

Dr. Longo directed his remarks to the issue of how basic neuroscience research contributes to patient care. In doing so, he outlined ways in which investigators in the neurology department and Neuroscience Center will form partnerships to tackle Alzheimer's Disease, Parkinson's disease and stroke.

"This will allow us to recruit faculty that are doing work in cutting-edge clinical areas, and it will provide an environment for us to further develop advanced therapeutics in areas of neurology that are at this point so-called 'untreatable.'"

In his remarks, Dr. Snider noted that neuroscience "stands at the intersection of biology, psychology, physiology and information sciences. It encompasses the physics and chemistry of imaging. Even anthropology and philosophy are close at hand. Indeed many students are

drawn to neuroscience in the hope of gaining insight into the age-old mind/body problem so central to Western philosophy."

Dr. Snider stated that neuroscience is advancing rapidly in large part due to tools provided by genetics and genomics – areas in which UNC and the state have committed major resources. "One tool of genetics critical to neuroscience is mutagenesis, or disruption of the DNA sequences that make up a gene. This is an area where UNC demonstrates world leadership."

Dr. Snider emphasized that with the new building, North Carolinians are also supporting efforts to cure neurological and psychiatric diseases. "This new building will provide a center of gravity for neuroscience research in Chapel Hill. I am confident that the impact of this beautiful new space will be manifested soon by additional recruitment of the very top young neuroscientists from around the country and in an increasing national profile for UNC neuroscience."

Dr. James R. White received special recognition for his \$1 million contribution to the Neuroscience Center to establish the Helen Lyng White Fellowships in Neuroscience Research. Enthusiastically greeted by the audience was Mona C. Buhusi, MD, PhD, the first Helen Lyng White fellow. A wall in the new building will hold plaques to honor fellowship winners. 



Chancellor James Moeser, N.C. Sen. Howard Lee and Dean Jeffrey L. Houpt.



Promising results of cancer drug testing prompt phase II clinical trial

An experimental cancer drug's promising results in a small number of patients with the blood-borne disease multiple myeloma are prompting a larger clinical trial at major cancer centers, including the UNC Lineberger Comprehensive Cancer Center.

This investigational drug, named PS-341 and made by Millennium Pharmaceuticals, is a proteasome inhibitor that interferes with the function of an important cellular protein complex, and provokes cells to program their own destruction. In laboratory cell culture and animal studies at UNC and elsewhere, inhibitors such as PS-341 killed cancer cells much more readily than normal cells. These findings led to a Phase I clinical trial now nearing completion at UNC aimed at finding the best dose of PS-341 to use for patients.

"Most Phase I studies are able to find a tolerated dose of a drug, but it's less common to see significant clinical responses," said Robert Z. Orlowski, MD, PhD, assistant professor of medicine at the UNC-CH School of Medicine. Dr. Orlowski, the principal investigator, noted that Drs. Thomas Stinchcombe, Beverly Mitchell and Thomas Shea also played key roles.



ORLOWSKI

"The results from this study are exciting because PS-341 was able to benefit several patients who were not helped by standard chemotherapy," Dr. Orlowski said.

PS-341 seemed particularly active in two diseases: multiple myeloma and non-Hodgkin's lymphoma. One patient with myeloma had a complete response, with a normal bone marrow test and complete disappearance of a myeloma protein from their blood that is used to document how much disease is present. Others had partial responses.

"I think these results are very encouraging. All of these patients had already received everything that could be given to patients with myeloma, and some had bone marrow transplants as well," Dr. Orlowski said.

Therapy is delivered intravenously, via a small syringe. Dr. Orlowski said it is very well tolerated, causing little or no nausea or vomiting, and no hair loss as would be expected with other chemotherapy drugs. Treatment was given twice a week for four weeks, followed by a two-week break.

Based in large part on the Phase I results, a Phase II study for myeloma patients has opened at Lineberger and Memorial Sloan-Kettering Cancer Center in New York, Dana Farber Cancer Center in Boston, M.D. Anderson Comprehensive Cancer Center in Houston and the Mayo Clinic in Rochester, Minn.

Financial support for the Phase I study came from the Leukemia and Lymphoma Society.

METHOD TO RESTART HEART MAY HELP SAVE LIVES ALMOST CERTAINLY LOST

Very few people survive a traumatic injury that causes cardiac arrest after profound blood loss.

But according to new UNC research, a method for delivering an oxygen-carrying fluid to resuscitate the heart after cardiac arrest may help save trauma victims by buying valuable time to allow surgeons to repair the damage.

A report of the still-experimental procedure is published in the November issue of *Critical Care Medicine*.

Researchers led by James E. Manning, MD, associate professor of emergency medicine, describe selective aortic arch perfusion (SAAP) as a potentially effective way to pump an oxygen-carrying fluid into the aorta. The fluid is HBOC-201, a hemoglobin-based oxygen carrier developed by Biopure Corp. in Cambridge, Mass.



MANNING

"This procedure involves taking a specialized balloon catheter developed here at UNC and advancing it though the femoral artery and into to the chest, into the aorta," Dr. Manning said. "When the balloon is inflated and the oxygenated fluid pumped in, the upper part of the body is selected for perfusion. It's about the fastest way to relatively isolate the heart and the brain and perfuse it with an oxygenating solution."

In previous animal experiments with SAAP, researchers focused on cardiac arrest associated with heart rhythm disturbance tied to sudden death. Dr. Manning said it became evident that people who were dying from hemorrhage – who go into cardiac arrest from bleeding, such as might happen after traumatic injury – might benefit from this perfusion technique.

The new study involved a pig model of liver injury and severe bleeding. The subsequent blood pressure drop caused the animals' hearts to stop beating. Six others were treated with SAAP plus BioPure's HBOC-201. These were compared to a control group of six animals where SAAP was used with a saline solution, which has very limited oxygen-carrying capacity.

Spontaneous heartbeat with sustained aortic blood pressure occurred only in those animals that received the HBOC-201 oxygen-carrying solution.

Dr. Manning said more animal studies are needed that would further demonstrate the procedure's benefits for emergency trauma patients. These could be followed by a clinical trial in the emergency setting.

UNC study co-authors with Dr. Manning were Drs. Laurence M. Katz and Christopher C. Baker.

Also from UNC were Neil Batson, BS and Shane L. McCurdy, BS.

AIR POLLUTION CAUSES LUNG DISEASE IN SCHOOL-AGE CHILDREN

Children who grow up breathing polluted air may be at increased risk of lung disease, according to a study of school-age children in Mexico.

Researchers reached that conclusion after evaluating standard chest X-rays of 241 southwest metropolitan Mexico City children and another 19 from a small

coastal town. The city children were exposed daily to high levels of a variety of pollutants, compared to the absence of such pollution in the coastal town comparison group.

Findings were presented in November at the 87th Scientific Assembly and National Meeting of the Radiological Society of North America in Chicago.

The study investigators were led by Dr. Lillian Calderon-Garciduenas of the Department of Environmental Sciences and Engineering at the UNC School of Public Health and the National Institute of Pediatrics in Mexico City and Dr. Lynn A. Fordham, associate professor and section chief of pediatric imaging at UNC.

Dr. Fordham pointed out that chest X-rays from Mexico were interpreted by radiologists at UNC who had no knowledge of where the children lived. "We looked at the kids in a blinded fashion and with no knowledge of Dr. Calderon's project," she said. "We were able to separate those who were exposed to air pollution and those who were not."



FORDHAM

Excessive inflation (hyperinflation) of both lungs was found in 63 percent of the city group. About 52 percent of the city children showed an abnormal amount of interstitial markings in their lungs, changes that may be predictive of future lung abnormalities.

The study also found abnormalities in CT scans obtained in 25 of the children whose chest X-rays were the most abnormal. Further analysis pointed to a significant link between hyperinflation, interstitial markings and exposure to the polluted atmosphere of southwest metropolitan Mexico City. All children in the Mexico City study group lived within a 10-mile radius of a pollution monitoring station.

"I think the study may contain findings that are concerning to parents," Dr. Fordham said. "They indicate that air pollution may cause lung disease in children."

— By Leslie H. Lang

Faculty

JOHN BOGGESE, MD, assistant professor of gynecologic oncology, received the Cancer Prevention and Control/Cancer Epidemiology Research Award. The project is titled "Telomerase and Cervical Carcinogenesis: The evaluation of detection methods with emphasis on HIV infected women." Dr. Boggesse also received the 2001 UNC/IBM Instructional Technology Developmental Grant for the development of Internet and DVD production of surgical video training.

JOHN BUSE, MD, PHD, associate professor of internal medicine and chief of the division of general medicine and clinical epidemiology, has been appointed the study section vice-chair of the National Heart Lung and Blood Institute, National Institutes of Health Action to Control Cardiovascular Risk in Diabetes Study. He also has been elected to the National Board of the American Diabetes Association and is chair of the ADA's Diabetes Cardiovascular Disease Advisory Committee.

MYRON S. COHEN, MD, professor of medicine, microbiology and immunology, has been named the J. Herbert Bate professor. The professorship was established in 1986 through a gift by Harold Bate of New Bern in honor of his father. Dr. Cohen is also chief of the Division of Infectious Diseases and director of the UNC Center for HIV-STDS and Infectious Disease.



COHEN

ANNAMARIE CONNOLLY, MD, clinical assistant professor of urogynecology and reconstructive pelvic surgery, received the 2001 APGO Excellence in Teaching Award.

MARC FRITZ, MD, professor and chief of the division of reproductive endocrinology and infertility, was elected to board of directors of the Society for Reproductive Endocrinology and Infertility. Dr. Fritz also was named new chair of the Practice Committee for the American Society for Reproductive Medicine.

ADAM GOLDSTEIN, MD, assistant professor of family medicine, received an award from the Tobacco Prevention & Control Branch of the N.C. Division of Public Health. The purpose of the project, titled "Environmental Tobacco Smoke Education, Training & Assessment," is to increase awareness, education and adoption of voluntary policies that protect public health by reducing exposure to environmental tobacco smoke in North Carolina.

JACK GRIFFITH, MD, professor of microbiology and immunology, has been selected for the American

Society of Biochemistry and Molecular Biology's Herbert A. Sober Lectureship Award. The award recognizes outstanding contributions to biochemical and molecular biology research, with particular emphasis on the development of methods and techniques to aid in research. The society recognized Dr. Griffith as the world's most outstanding electron microscopist working with DNA.

ROBERT GWYTHIER, MD, MBA, professor of family medicine and director of medical student education, recently was installed as president of the North Carolina Academy of Family Physicians at the annual meeting of the NCAFP. The term of office is one year.

KATHERINE E. HARTMANN, MD, assistant professor of obstetrics and gynecology, has been named a recipient of the 2001 Pfizer Scholars Grant for Faculty Development in Clinical Epidemiology. Pfizer's U.S. pharmaceuticals division awarded the three-year grant of \$65,000 a year to Dr. Hartmann, who is co-director of the North Carolina Program for Women's Health Research. She is one of 23 academic scientists in the United States among the 2001 Pfizer Fellows and Scholars, and one of two selected for clinical epidemiology.



HARTMANN

BARRY R. LENTZ, PHD, professor of biochemistry and biophysics, recently was elected to serve a three-year term on the Biophysical Society's Council. He will assume the office in February at the 2002 annual meeting in San Francisco. The Biophysical Society is a professional scientific society established to encourage development and dissemination of knowledge in biophysics. Since its founding in 1956, the society has grown to more than 6,400 members throughout the United States and the world.

BEVERLY MITCHELL, MD, professor of internal medicine and chief of the division of hematology/oncology, and Jeffrey Lieberman, MD, distinguished professor of psychiatry and vice chair for research and scientific affairs, have been elected to the Institute of Medicine of the National Academy of Sciences. This organization consists of about 600 members nationwide and is involved with the study of major issues related to the fields of medicine and public health. Drs. Lieberman and Mitchell were two of 60 new members recently elected to the Institute of Medicine. Dr. Mitchell also is currently serving as President of the American Society of Hematology, an organization of 10,000 physicians and researchers involved with diseases of the blood and bone marrow.

EDWARD A. NORFLEET, MD, professor and executive vice chair of anesthesiology, was named the 2001 Norma Berryhill Distinguished Lecturer.

BRENT A. SENIOR, MD, chief of the division of rhinology, allergy and sinus surgery, has been appointed to the Socioeconomic Committee of the American Rhinologic Society. He also has been appointed to serve as editor of the society's newsletter.

CAROL G. SHORES, MD, PHD, assistant professor of surgery, and William W. Shockley, MD, professor of otolaryngology/head and neck surgery, have been awarded Teaching Excellence Awards. They were selected by the Department of Otolaryngology and the School of Medicine to receive these awards in recognition of their sustained outstanding contributions to the teaching mission.

PHILIP SLOANE, MD, MPH, ELIZABETH SHREVE and OSCAR SEXTON GOODWIN distinguished professor of Family Medicine, received an award from the Alzheimer's Association. The project, "Evaluating Quality of Life Using Behavioral Observation and Mapping," will examine the best-developed observational measures currently in existence for documenting quality of life in moderate and advanced dementia.

JEFFREY SONIS, MD, MPH, clinical assistant professor of family medicine, was invited by the Francois-Xavier Bagnoud Center for Health and Human Rights at the Harvard School of Public Health to join a small group of experts to develop a model curriculum on human rights for public health training and practice. This effort is being funded by the Josiah Macy, Jr. Foundation and is sponsored by Harvard and the American Public Health Association International Human Rights Committee.

JEFFREY KEITH SMITH, MD, assistant professor of neuro-radiology, received a Radiological Society of North America seed grant for "Use of MR Measurements of Blood Flow, Oxygenation, Water Diffusion and Metabolism to Predict and Monitor Responses of Malignant Brain Tumors to Therapy."

OLIVER SMITHIES, DPHIL, excellence professor of pathology, recently received the 2001 Albert Lasker Medical Research Award for Basic Medical Research, the nation's most distinguished honor for outstanding contributions to basic medical research. Dr. Smithies shares the award with two other scientists for their pioneering work using mouse embryonic stem cells to create animal models of human disease. The other recipients are Mario Capecchi of the University of Utah and Martin Evans of Cardiff

University of Wales. The Lasker Awards have often been called "America's Nobel Prize," and 63 researchers who won a Lasker went on to receive the Nobel Prize, including four in the past three years.

JOEL TEPPER, MD, professor and chair of radiation oncology, has been elected president-elect of the American Society of Therapeutic Radiology and Oncology and took office at the society's annual meeting recently. He will subsequently be president and chairman of the board. With nearly 7,000 members, the American Society of Therapeutic Radiology and Oncology is the primary society of radiation oncologists in the United States.

Alumni

60s

J. Lewis Sigmon, Jr., MD, '66, was the recipient of the Second Peter Curtis, MD, Award from the UNC Department of Family Medicine. Last June, Lewis retired from the Carolinas HealthCare System.

80s

Jocelyn M. Pyles, MD '83, was married to Marshall A. Elo August 26 in Charlotte, N.C., on her parents' 50th wedding anniversary. Jocelyn is a physician in Texas with the Houston Department of Health.

Charles S. Roberts, MD '86, is a cardiovascular surgeon. He recently entered private practice with the Winchester Surgical Clinic in Winchester, Va., located in the upper Shenandoah Valley.

Gorden Early, MD '87, celebrated the birth of his first child, Brandon, in June 2000. Dr. Early says that Brandon is his "pride and joy."

Craig Charles, MD '88, welcomed the birth of his third child, John Harrison, in February 2001. Last summer, Dr. Charles started his own infectious diseases practice in Rock Hill, S.C.

90s

Terri Wood-Cummings, MD, '90, and husband Anthony celebrated the birth of their first child, Nicole Marie, in November.

Deaths

Robert Brickhouse, CMED, '40, died in April. He lived in Charlottesville, Va. His specialty was internal medicine.

Richard Willingham, CMED, '47, died in August. He lived in Louisville, Tenn. His specialty was pediatrics.

James Alford, MD '66, died in October. He lived in Morrisville, N.C. His specialty was surgery.



SLOANE

Floyd W. Denny, MD, dies at 77

Floyd W. Denny Jr., MD, 77, died Oct. 17, 2001. The Alumni Distinguished Professor of Pediatrics at the University of North Carolina at Chapel Hill School of Medicine, was born and raised in Hartsville, S.C. In 1943, he entered Vanderbilt University School of Medicine and subsequently held faculty positions in pediatrics at the University of Minnesota, Vanderbilt University, Case Western Reserve University, and UNC-Chapel Hill, where he was chairman of the department of pediatrics for 21 years.

"He took a small department of six faculty in 1960 and built one of the leading departments in the country," said Alan Stiles, MD, professor and chair of pediatrics at UNC. "Dr. Denny was recognized as one of the giants of pediatrics. His career spanned five decades, remaining active in our teaching program until 12 months ago when declining health forced him to stop work."

As an investigator, Dr. Denny's numerous publications focused in three areas. His pioneering work in streptococcal infections and their consequences included studies of the epidemiology, pathogenesis, and prevention of rheumatic fever. During active service in the U.S. Army, Dr. Denny was a key member of the Streptococcal Disease Laboratory at Warren Air Force Base in Wyoming. While there, he was lead author of a now famous 1950 report in the *Journal of the American Medical Association*, "Prevention of Rheumatic Fever: Treatment of the Preceding Streptococcal Infection." This landmark paper was the first report of successful rheumatic fever prevention by effective treatment of streptococcal infections. It was also the basis for the 1950 Lasker Award to members of the laboratory.

"Prevention of rheumatic fever has saved the lives of countless children and adults, and has spared millions the debilitating effects of acquired heart disease," said Judson J. Van Wyk, MD, Kenan Professor Emeritus of Pediatrics at UNC-Chapel Hill.

Dr. Van Wyk pointed to his colleague's second area of research: defining the role of *Mycoplasma pneumoniae*

in respiratory infections. "His studies, in collaboration with long-time colleague Wallace Clyde, identified *M. pneumoniae* as the most frequent cause of pneumonia in older children and young adults."



FLOYD W. DENNY

Dr. Denny's third area of research was the epidemiology of respiratory infections in children. He helped inaugurate long-term surveillance studies of respiratory infections in a day care center and in private practice. The findings added important new knowledge to the understanding of seasonal variation and susceptibility to respiratory syndromes caused by the most common microbial agents.

Dr. Denny also played an important role in fashioning the N.C. Area Health Education Center (AHEC) network that links the medical schools with local communities.

During his tenure as chairman of pediatrics, Dr. Denny influenced the development of more than 300 pediatric residents and fellows. Many of these trainees now occupy academic positions in departments of pediatrics across the country.

Among his many awards and recognitions, Dr. Denny received The Outstanding Civilian Service Award by the Surgeon General of the Army, the Distinguished Physician Award of the Pediatric Infectious Disease Society, and the John Howland Award from the American Pediatrics Society, its highest honor. The governor of North Carolina awarded Dr. Denny The North Carolina Medal of Science, and in 1988, the board of governors of the 16 UNC system awarded him the O. Max Gardner Award, which recognizes a faculty member judged to have made the greatest contribution to the welfare of humanity.

Dr. Denny was married for 54 years to Barbara H. Denny, who died Sept. 30, 2000.

He is survived by three children, Zoe Ulshen of Carrboro; Mark Denny and his wife, Susan, of Pacific Grove, Calif.; and Tim Denny and his wife, Susan, of Athens, Ga.; and four grandchildren.

— Leslie H. Lang

GENOMICS SYMPOSIUM SCHEDULED FEATURING FRANCIS COLLINS, MD, PHD

A special symposium, "Exploring Medicine in the Post-Genome World," will take place April 19-20 in Chapel Hill during Spring Medical Alumni Weekend at the William and Ida Friday Continuing Education Center in Chapel Hill and Berryhill Hall.

During the two-day symposium, speakers from UNC and research institutions nationally and internationally will address a variety of subjects. Among them: "Genome Variation and the Genetic Features of Complex Human Diseases;" "Genomics: Changing America's Healthcare System;" "Human Evolution and its Meaning for Medical Genetics;" "Functional Genomics in Drug Discovery;" "Fetal Determinants of Adult Health" and "The Accumulation and Expression of Natural Genetic Variation."

Also, **Francis Collins, MD, PhD**, a UNC alum and head of the National Institutes of Health's genomics initiative, will speak on "Genomics, Medicine and Society."

"The genome projects are having a profound impact on health care delivery.

The purpose of the symposium is to articulate some of the expected

changes as we look ahead to the next 50 years of medicine at UNC-Chapel Hill," said **Terry Magnuson, Ph.D.**, Kenan Professor of Genetics and Director of the Carolina Center for Genome Sciences.

For more information on Spring Alumni Weekend activities, please see the calendar on the back cover.

DONATIONS YIELD ACCESS TO DIGITAL LIBRARY SERVICE

Donors who contribute \$250 or more annually to UNC's Health Sciences Library can now receive the benefit of access to the AHEC Digital Library.

The AHEC Digital Library is a collection of electronic resources and services in the health sciences. It was initiated by North Carolina's four academic medical centers — UNC, Duke University, East Carolina University and Wake Forest University — and North Carolina Area Health Education Centers (NC AHEC).

"With the AHEC Digital Library, the Health Sciences Library has the ability to extend electronic resources to alumni as well as other users. We now can offer electronic resources to graduates as they move on and throughout the state," said Lisa Rae, director of development and communications.

The AHEC Digital Library allows health care providers and researchers from across the state who are registered users access to licensed resources. Some of these resources include OVID, MD Consult and select full-text journals.

Additionally, the AHEC Digital Library allows users to create a customized profile, which quickly displays information of greatest interest to the particular user. Members also receive access to document delivery and a librarian for expert research assistance, as well as information on networking and continuing education.

"The AHEC Digital Library gives alumni the opportunity to have the best information at their fingertips," Rae said.

To learn more about the AHEC Digital Library or how to become a Friend of the Library, call Lisa Rae at (919) 966-0944 or e-mail Asklib@med.unc.edu.

FAMILY MEDICINE RECEIVES TRAINING GRANT

The Department of Family Medicine recently received a residency training grant, funded by Bureau of Health Professions, of approximately \$500,000 over three years for the development of its residency's geriatric curriculum.

Key contributors are **Amrit Singh, MD, Philip Sloane, MD, MPH, Jane Arndt, MA, Julie Price, MD, Bron Skinner, PhD**, and **John Harrington, MD**.

PASSINGS

Earl Siegel, MD, MPH, professor emeritus, died June 11, 2001, at age 77. Dr. Siegel joined the faculty of the Department of Maternal and Child Health in 1961, working for both the School of Medicine and the School of Public Health. From 1967 to 1975, he served as department chair. Among his most important accomplishments was the development of regional data networks for evaluating and measuring the progress of organized programs offering services to mothers and their infants.

Charles A. Bream, MD, professor in the Department of Radiology, died July 1, 2001, at age 86. Dr. Bream joined the School of Medicine's faculty in 1952, helping launch the Department of Radiology. For nearly 20 years, he served as department vice chairman, and on two occasions served as acting chairman. He was highly regarded by his colleagues for his diagnostic accuracy and expertise in plain radiographs and gastrointestinal barium studies.



COLLINS

Women's Resource Center receives \$130,000

Wyeth-Ayerst Women's Health Care has pledged \$130,000 to endow the new Women's Resource Center Library in the N.C. Women's Hospital.

Jeff Robertson, Wyeth-Ayerst's area business director for women's health care, along with Jeff Beavers, the company's area account director, and Cindy Williams, area account manager, came to the Women's Hospital in October to present a check for \$30,000 to Valerie Parisi, MD, chair of the Department of Obstetrics and Gynecology. This payment will be used to purchase the materials needed to initially stock the library. The remaining \$100,000 of Wyeth-Ayerst's pledge will be placed into an endowment fund enabling the center to purchase updated and replacement reference materials on an annual basis.

To acknowledge Wyeth's generosity, the library will be named the Wyeth-Ayerst Women's Resource Center Library.

Robertson explained that "Wyeth-Ayerst made this gift because of its corporate commitment to women's health and its local commitment to the Women's Hospital and the health of North Carolina women." To underscore its commitment to women's health, Wyeth-Ayerst recently formed a Women's Health Care Division and established a dedicated

research facility, the Women's Health Research Institute, located near Philadelphia.

Dr. Parisi said she is excited about the partnership, noting that "the generous gift from Wyeth-Ayerst will help support our Women's Resource Center and improve the opportunity for women in North Carolina to become better educated

about their health. Wyeth-Ayerst has had a long track record of philanthropy and innovation in patient education, as well as pharmacologic research. We are extremely grateful that they were willing to partner with us in our quest to disseminate important health maintenance and disease prevention information to North Carolina women."

The Women's Resource Center is located off the Women's Hospital lobby and enables women to locate accurate health care information, irrespective of specialty.

The library will be stocked with print and video resources on topics as varied as cardiology, obstetrics, gynecology, oncology, auto-immune diseases and more. It also will offer a unique research feature: access to health-related Internet sites that have been pre-screened for content veracity. An on-site librarian will assist women who are conducting research and guide them to Web and print publications that best suit their informational needs and reading levels.

If you would like more information about the Women's Resource Center or are interested in supporting it, please contact Kay-Frances Brody, director of development for the N.C. Women's Hospital, at (919) 966-1201 or e-mail kbrody@med.unc.edu.



From left, Jeff Beavers and Cindy Williams, area account managers with Wyeth-Ayerst Women's Health Care, Valerie Parisi, MD, chair of UNC's Department of Obstetrics and Gynecology, and Jeff Robertson, Wyeth-Ayerst area business director, gather for check presentation.

Dance Marathon strives toward expanded role this year

In just four years, the UNC Dance Marathon has become the largest student-run fund-raiser and the largest sole fund-raiser for the N.C. Children's Hospital. And the fourth annual marathon on Feb. 22-23 in Chapel Hill promises to be the most successful yet.

The mission of the marathon is to unite the UNC campus and community in the common goal of improving the lives of the families of children receiving care in the Children's Hospital. Both aspects of the mission have expanded exponentially this year.

The money the marathon has raised has improved the lives of the families of children receiving care in the hospital. The event collected more than \$100,000 last year alone, and the Department of Social Work uses that money daily to assist families while their children are in the hospital.

Last year, 350 individuals stood on their feet for 24 hours to display support for the children, families, staff and doctors.

And in just one week of accepting applications, nearly 1,000 students and community supporters applied to dance in Marathon 2002 in February.

Along with further development of the original mission, individual marathon committees have implemented new initiatives to expand the event's reach and impact in the hospital and the community.

Two area high schools will hold mini-marathons to support the UNC Dance Marathon, and the Residence Hall Association and UNC student organizations also are more involved. Student groups are coming together to host a Holiday Benefit Concert for the Kids, and the residence halls are competing in Penny Wars. There also will be a volleyball tournament in January.

The Silent Auction has expanded, as well. And an online auction linked through www.uncmarathon.org will begin Feb. 1.

Things are changing at the hospital, too. A "Dancer Buddy" program has been established to pair pediatric patients with a dancer for the whole year. The dancer and the children will establish a relationship that offers the children support and care they need while sick and away from family and friends. Dancers will be assigned to groups that visit the Pediatric Playroom and volunteer together at the Ronald McDonald House. And UNC faculty and drama students will host reading hours with the kids.

If you'd like to learn more about the marathon or how you can be involved, visit www.uncmarathon.org or contact Leia Kelly at LMKelly@email.unc.edu.

Pediatrics receives gift focusing on oral health

The Department of Pediatrics has received a generous gift from James D. Halper of Greenwich, Conn., to establish a new emphasis on children's oral health. Dental care is the most prevalent disease of childhood and has enormous health and social consequences for children and their families. Oral health has been given little attention in medical school or primary care residency programs. The aim of this new program is to educate pediatric residents in oral health so they will be prepared to provide preventive oral screenings, patient education and fluoride treatments for children.

The program is established in honor of Bernard Singer, a 1934 graduate of the UNC School of Business.

Honor Roll of Donors addition

The Fall 2001 issue of the Bulletin included the Medical Foundation's annual "Report to Donors," which featured alumni donors who made contributions to the Medical School during the fiscal year 2000-01. We express our sincere apologies to Leonard S. Wojnowich, MD, '79 of Savannah, Ga., who contributed a gift in the \$1,000 to \$9,999 range and whose name was inadvertently omitted from the list



What a wonderful time we all had at the Fall Medical Alumni Weekend in October.

As I said in my remarks at the dinner that weekend, I wish each physician and spouse could have experienced our weekend there in Chapel Hill. It was great fun for me, and most importantly the event revitalized my faith in our profession.

Recently, I took part in the White Coat Ceremony at Memorial Hall. One hundred and sixty-one first-year medical students received their white coats, and many parents and friends were there to witness as they recited a form of the Hippocratic Oath. Of course, the oath's purpose is to clarify to students that a physician's responsibility is to both take care of patients and also to care for patients. In other words, doctors should care as well as cure.

As I watched these young students, filled with hope and promise, recite their oath, I was moved by the beauty and timelessness of the occasion.

Previously, I also had attended the Norma Berryhill Distinguished Lectureship. Dean Bonderant established this annual event to honor one of our distinguished faculty and also to recognize Norma Berryhill and Dr. Reece Berryhill, who were instrumental in the development of our medical school.

Dr. Ed Norfleet gave the 17th lecture, which was attended by a large turnout of faculty, friends and family, among them UNC President Molly Broad, Chancellor James Moeser and Jeffrey L. Houpt, dean of the School of Medicine.

Our responsibility to our profession is to continue into the next generation the awesome responsibilities we bear in our daily activities as physicians. The presence of those who attended our memorable Alumni Weekend confirmed a commitment to our medical school and our profession. I thank you for that and I hope you had a wonderful time. For those who were not able to join us, I hope to see you at our gala Spring Alumni Weekend in April.

Thomas J. Koontz, MD, '66

Jan. 24 – Winston-Salem

Dean's Reception for Forsyth County

Feb. 14 – Chapel Hill

Cardiovascular Issues in Women

Feb. 16 – Chapel Hill

Pain, Addiction and the Law

Feb. 19 – Raleigh

Dean's Reception for Wake County

March 7 – Chapel Hill

Neuro-Ophthalmology

March 7, 12, 19, 26 and April 2 – Chapel Hill

Mini-Medical School Lecture Series

March 21 – Greensboro

Dean's Reception for Guilford County

April 5-6 – Chapel Hill

Symposium on Tissue Factor and Factor VII

April 10-12 – Chapel Hill

26th Annual Internal Medicine Conference

April 16 – Chapel Hill

Emergency Medicine Research Forum

April 19-21 – Chapel Hill

Medical Alumni Weekend

Friday, April 19

- Medical Center's 50th Anniversary Symposium

"Exploring Medicine in the Post-Genome Era"

Invited Speakers include: Suzanne Cassidy, MD, L.

Luca Cavalli-Sforza, MD, Aravinda Chakravarti, PhD,

Judith Hall, MD, Lee Hartwell, PhD, Luis Herrera-

Estrella, PhD, Thomas H. Murray, PhD, Edward O'Neil,

PhD, Robert Tepper, MD, Terry Van Dyke, PhD

- 20th Annual Spicer-Breckenridge Lecture

Francis Collins, MD, PhD

- Medical Center's 50th anniversary banquet

Saturday, April 20

- Alumni Business Meetings – Election of Officers –
Endowment Grant Awards

- Continuation of Symposium "Exploring Medicine in the
Post-Genome Era"

- Subspecialty group meetings

- Class Reunion Activities – 1942, 1947, 1957, 1962,
1967, 1972, 1977, 1982, 1987, 1992

Sunday, April 21

- All Alumni Brunch

For more information, go to www.med.unc.edu/alumni
and www.med.unc.edu/cme

Estate Planning Notice

Many individuals would like to make a major gift to the UNC medical center, but cannot commit current assets for such a purpose. Through a will, however, anyone can make a more significant gift than they might ever have thought possible by designating a specific sum, a percentage, or the residue of their estate for the benefit of the medical center.

To provide a bequest, simply include a paragraph in your will naming The Medical Foundation of North Carolina, Inc. as a beneficiary. For example:

"I give, devise and bequeath (the sum of \$ _____) or (_____ % of my estate) or (the residue of my estate) to The Medical Foundation of North Carolina, Inc., a 501(C)(3) created to maintain funds for the UNC medical center with principal offices located at 880 Airport Road, Chapel Hill, North Carolina."

This language creates an unrestricted bequest for use by the medical center when and where the need is greatest, or you may specify that your gift be used for a particular purpose.

For further information on bequests, contact Jane McNeer at (919) 966-1201, (800) 962-2543, or jmcneer@email.unc.edu.

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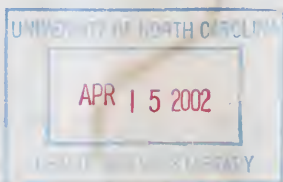
Medical Alumni Bulletin

School of Medicine, University of North Carolina at Chapel Hill

GOLDEN JUBILEE
KEEPSAKE ISSUE

50!

**The School of Medicine
and UNC Hospitals
mark five decades
of teaching and caring**





This year, The University of North Carolina at Chapel Hill will celebrate the kickoff of the public phase of Carolina First, a campaign to raise at least \$1.5 billion in private gifts. The goal of the campaign is to establish Carolina as the nation's leading public institution by funding the university's top priorities, including professorships, scholarships and fellowships, and departmental and program needs.

As part of the Carolina First campaign, the School of Medicine and the UNC Health Care System are launching their own fund-raising effort, The Promise of Discovery: The Case for Private Investment in Medicine, which aims to raise \$300 million. This campaign will build on the strengths of our faculty, their research and clinical expertise, and new technologies and advances made possible by genetics research and its clinical applications.

The Promise of Discovery campaign begins as we celebrate in April the 50th anniversary of the School of Medicine as a four-year institution, and look forward to September, when we will mark the 50th anniversary of N.C. Memorial Hospital.

The School of Medicine and its clinical complements have grown tremendously since 1952, and we have much to be proud of. The school has been recognized as one of four "bimodal" schools that is ranked in the top 20 percent of U.S. medical schools in both the production of primary care physicians and NIH research grant funding. It also established itself as a research leader in areas such as genomics and molecular medicine. And creating a new Institute for Molecular Medicine is a major focus of The Promise of Discovery campaign.

Each year sees an increase in the number of patients treated by UNC physicians. Last year more than 31,000 patients were treated at UNC Hospitals.

But the continued success and improvement of the School of Medicine faces two significant challenges: a decade-long trend of stagnant funding from the state of North Carolina and competition from peer medical schools with endowments several times larger than ours.

Since 1990, the portion of the school's budget that is funded by the State of North Carolina has declined from 21 percent to 14 percent. In the current year the school has suffered the loss of over \$5 million in state funds, stemming from budget cuts ordered by the General Assembly and Gov. Mike Easley in response to the state's current fiscal crisis. Absent a significant, unanticipated improvement in the state's revenue picture, we are bracing ourselves for yet additional cuts next year.

Fortunately, the school's administrative and alumni leaders recognized in the late 1980s that advances in academic quality could not be sustained with state assistance alone and began a concerted effort to secure funding from other sources. As a result, the school has more than doubled its funding from the National Institutes of Health, from \$61 million in 1990 to \$144 million in 2000. It now ranks 15th among all of the nation's medical schools in NIH research funding.

But the size of our endowment still lags behind those of our prestigious peers, who are building their war chests to expand their capabilities in genomics and molecular medicine. This could threaten our current status as leaders in these fields. In 1999, for example, our endowment stood at \$128 million. By comparison, medical school endowments for some of our peers were \$138 million at the University of Pittsburgh, \$302 million at the University of Michigan and \$603 million at the University of California at Los Angeles.

The Promise of Discovery campaign embodies a positive strategy for meeting this challenge. Elements of the strategy include, but are not limited to, investing in the quality of faculty by endowing department chair and center director positions with distinguished university professorships, endowing visiting professorships for several UNC centers, building a facility for the Institute for Molecular Medicine, upgrading laboratories and buying specialized scientific instruments.

Private investments will be allocated among endowment, capital improvements and program funds to maximize their total return. The campaign's fund-raising priorities include \$90 million to establish the Institute for Molecular Medicine; \$160 million to support research and initiatives in cancer, diabetes, genomics, heart disease, infectious disease and the neurosciences; and \$50 million to enhance our endowment for student, faculty and clinical support.

Help from our loyal alumni is essential if the School of Medicine is to continue its growth, improvement and national leadership. Please support The Promise of Discovery campaign with your financial contribution.

Jeffrey L. Houpt, MD
Dean, School of Medicine
Vice Chancellor for Medical Affairs
CEO, UNC Health Care System

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on the cover



Famed clown Emmett Kelly. The iron lung. Coach Dean Smith kicks off the annual Kids Card Campaign. The Berryhills. Graduation. And MacNider. A fond look back – and careful look ahead – as the School of Medicine and N.C. Memorial Hospital mark a big milestone. (Cover photo by Brian Strickland. Inset photos courtesy UNC Medical Illustration & Photography, the N.C. Collection/Wilson Library and Brian Strickland.)

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A lasting impact

Fifty years ago, a group of visionaries created a four-year medical school and a hospital. Their endeavor turned around the health of an entire state.

But where does UNC go from here?



Not just MacNider: The School of Medicine is growing with new facilities, such as the Neuroscience Research Center.

NORTH CAROLINA MEMORIAL HOSPITAL UNC SCHOOL OF MEDICINE

Stories by Dick Broom

*We need vitamins and medicines and beds
to spare;
Places where the sick can go to get some
care.*

*If we do these things, then we will be the
state
Where the weak grow strong and the strong
grow great.*

— From "It's All Up to You"
Sung by Frank Sinatra and Dinah Shore

It may have been the most powerful public relations campaign North Carolina had ever seen. The goal was to persuade the people and their representatives in Raleigh to support an enormously ambitious plan to improve health care by building new hospitals, upgrading old ones and training more doctors.

World War II had just ended, and America's mood was upbeat. But in North Carolina, the celebration of victory and peace was tempered by the shame of having had so many of its young men rejected for military service because of poor health. During one six-month period in the middle of the war, the rejection rate hit 57 percent. For the entire war, the rate was the highest of all the 48 states. Not to mention that North Carolina ranked near the top in infant and childbirth deaths and near the bottom in the number of doctors and hospital beds per capita.

In 1945, the North Carolina Hospital and Medical Care Commission, which the governor had appointed to study the woeful state of health, recommended that North Carolina build new community hospitals and modernize existing ones where the need was greatest. The

commission also called for expanding the two-year University of North Carolina at Chapel Hill School of Medicine into a four-year school and for constructing a large general hospital to affiliate with the medical school.

An influential member of the Medical Care Commission — and perhaps the most passionate proponent of its recommendations — was Reece Berryhill, MD, dean of the School of Medicine.

"Dr. Berryhill's intelligence, caniness, knowledge of the state, loyalty, doggedness and absolute devotion to the medical school allowed him to organize a movement of faculty and alumni, prominent and lowly citizens, and political leaders — lay and medical — of the state that ultimately came to be called the Good Health Program," recalled the late William Blythe, MD, in his Norma Berryhill Distinguished Lecture in 1991.

Among those enlisted to promote the Good Health Plan was big-band leader Kay Kyser, a Tar Heel who later retired in Chapel Hill. At his request, the famous songwriting team of Sammy Cahn and Jule Styne composed a song, "It's All Up to You," to help generate public enthusiasm for the Good Health Plan. Kyser and his band recorded the song with two young singers named Frank Sinatra and Dinah Shore, and radio stations played it statewide.

Even Superman supports the Good Health Plan;

He knows what it will do.

Spread the health alarm to every town and farm,

And preach the Good Health view.

It's all up to you.

It's all up to you.



Recruitment: A place people want to come to – and stay

A big reason for the UNC medical school's excellence is its ability to attract some of the most gifted and dedicated people in their fields – and keep them here.

"The spirit of collegiality here explains why so many good people have come and stayed," said William McLendon, MD, professor emeritus of pathology and laboratory medicine. "The ability to work across department lines, and even with faculty in other schools on campus, is very attractive, and it's a great advantage when it comes to recruit-



Dr. Berryhill

ing outstanding faculty."

The origins of the school's collegial atmosphere are familiar to nearly every alumnus: the legendary graciousness and hospitality of Dean Reece Berryhill, MD, and his wife, Norma. In the years when the school was still small, they regularly invited new faculty members and their spouses to have dinner in their home. The Berryhills also hosted teas each year for all of the medical students and elaborate Christmas Eve parties for the faculty and their families.

"We felt it was important to involve families and get them interested in the university because that's how you build loyalty," Mrs. Berryhill said years later.

"The atmosphere of trust and the willingness to work with each other is one of the great secrets to why this place works so well," said Fred Sparling, MD, former chair of the departments of Medicine and of Bacteriology and Immunology, who joined UNC's faculty in 1969. "It has kept a lot of people, including me, from leaving."

It isn't just the "old silverbacks" on the faculty who

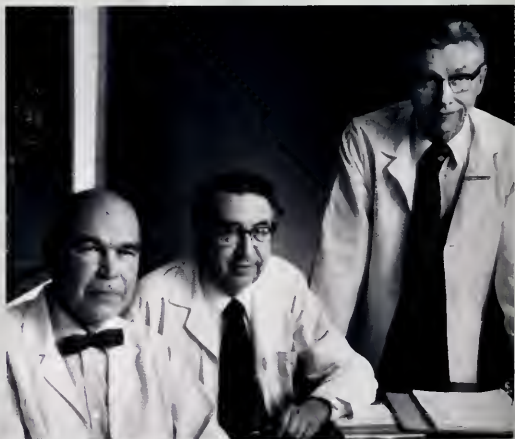
Starting from scratch

In 1947, the legislature approved the Good Health Plan and the budget to begin implementing it, including the expansion of the medical school and the construction of N. C. Memorial Hospital.

William McLendon, MD, professor emeritus of pathology and laboratory medicine, is completing a biography of Dr. Berryhill that he began with Dr. Blythe and the late Floyd Denny, MD. Dr. McLendon has said of Dean Berryhill: "He wasn't someone who would bowl you over with charisma, and he wasn't an outstanding public speaker, but he was so successful in getting and building the four-year school because of his conviction and incredible integrity."

Plans were delayed as political leaders haggled over where to locate the facilities. Eight cities coveted the prestige and economic stimulus that such a medical complex would bring, and four of them – Charlotte, Greensboro, Raleigh and Chapel Hill – presented strong cases. The issue was decided when out-of-state consultants recommended putting the four-year medical school

and hospital on the UNC campus. It was a wise and profoundly important decision, according to Christopher C. Fordham III, MD, dean emeritus and UNC-Chapel Hill chancellor emeritus.



From left, Robert Langdell, MD, Robert Wagner, PhD, and Kenneth M. Brinkhous, MD.

cherish the atmosphere of collegiality. Indeed, it continues to be an important factor in faculty recruitment and retention.

"People want to come here because they see how collaborative the institution is and how well people work together, combine their knowledge and get more accomplished," said Nancy Raab-Traub, PhD, professor of microbiology.

Most academic medical centers are not known for fostering the same degree of collegiality and mutual respect that is a distinguishing characteristic of this institution.

"The culture here has a value system in which the integrity, honesty and friendliness of people are as important as their skills," said Stanley Mandel, MD, executive associate dean for clinical affairs and chief of staff of UNC Hospitals. "To do well here, you've got to be smart and capable, of course, but you've also got to be someone whom other people value as a person. We recruit people like that, and they succeed here, and some of them stay their whole lives."

• • •

April 1 marked the 50th anniversary that Colin Thomas, MD, chair emeritus of Surgery, joined the School of

Medicine faculty. A few other giants of the institution and their years on the faculty include: Judson Van Wyk, MD, Kenan professor of pediatrics and a pioneer of modern endocrinology, 47 years; Joseph Pagano, MD, director emeritus of the UNC Lineberger Comprehensive Cancer Center, 41 years; Joe Grisham, MD, Kenan professor and former chair of Pathology and Laboratory Medicine, 29 years; Carl Gottschalk, who transformed nephrology, 45 years until his death in 1997; and Floyd Denny, MD, renowned pediatrician and department chair, 41 years until his death in 2001. 🏛️



Mrs. Berryhill



William Friday, left, speaks with guests at the dedication of the current N.C. Memorial Hospital building.

"If you build a professional school on an outstanding university campus, you have a chance for it to be outstanding," he said. "The interaction with the humanities, the social

sciences and the arts has been very enriching to the medical school and, from the beginning, has helped draw excellent faculty."

Dean Berryhill proved to be a masterful recruiter, luring people of national prominence to chair the school's new clinical departments — Charles Burnett for Medicine, Edward Curnen for Pediatrics, Robert "Daddy" Ross for Obstetrics and Gynecology and Nathan Womack for Surgery. Understanding the importance of building a strong research program, he brought in Ken Brinkhous to chair Pathology.

It was an impressive bunch.

"Dean Davison at Duke was reported to have commented that Dr. Berryhill had the best collection of clinical chairmen of any medical school since Johns Hopkins opened in the 1890s," Dr. McLendon said.

Members of the medical school's first four-year class arrived in 1950 and began their clinical education in 1952. North Carolina Memorial Hospital admitted its first patients on Sept. 2, 1952.



Over the years, what has been learned in the classroom has been put to use in clinical settings.

Fulfilling the dream

So, how have UNC's medical school and hospital made a difference over the last five decades?

Jeffrey Houpt, MD, current dean of the School of Medicine and chief executive officer of the UNC Health Care System, believes that to a large extent the dream creating a healthy North Carolina has been fulfilled – and that the medical school can rightly claim a large share of the credit.

"To a greater degree than most other medical schools around the country, ours has always been committed ideologically to improving the health of our state," Dr. Houpt said. "There is a tradition here of looking at what the larger needs of the state are and making sure we address those in the very best way, whether through education, research or patient care. It is a focus that the leadership and faculty of the school have sustained over the years, and it is as strong now as it was 50 years ago."

The school's adaptability is a big factor in meeting the state's needs, said Dean Emeritus Stuart Bondurant, MD. "Both the school and UNC Hospitals have adapted well to changing times and circumstances, addressing new kinds of problems purposefully and discarding obsolete undertakings. This ability may be the most valuable asset of these institutions and the one that will be called on most in the years ahead."

The Area Health Education Centers program (AHEC) is a



James H. Scatliff, MD, chair emeritus of Radiology.

perfect example of improving North Carolinians' health.

"AHEC has done a great deal to create a better distribution of physicians and other health care professionals into rural communities, making services of quality more available to everybody in the state," said Glenn Wilson, who in 1972 became AHEC's founding director. "We have provided medical education to many more North Carolinians than we could have without AHEC, and the



Dean Berryhill

program has helped doctors and hospitals around the state provide more and better patient services."

In 1979, there were only 12.4 physicians for every 10,000 people in North Carolina. Twenty years later, the ratio had improved to 20.22 physicians per 10,000 residents and was only fractionally lower than the national average.

"AHEC also has fundamentally changed medical education here by exposing faculty and students to community problems," Wilson said. "They have a better understanding of what is going on out in the state and what the needs are. You can't be actively engaged in the state all the time and not be changed by it. AHEC really has torn down the ivory tower, which is part of what it was intended to do."

The importance of national stature

Dean Houpt said the prominence of the school and its faculty in the national arena benefits the state by leading to a broader array of programs and perpetuating excellence.

"It enables us year after year to recruit better faculty, better students, better everything," he said. "One element of fulfilling our responsibilities to the state is to be nationally ranked,



Christopher C. Fordham III, MD



On rounds.

to be in that group of schools that can consistently attract the very best."

Attracting great talent – and keeping it here – is seen as one of the most important contributions of Joseph Pagano, MD, director emeritus of the UNC Lineberger Comprehensive Cancer Center.

"His ability to spot brilliant young scientists and support them in the development of their careers has been a major reason for the strength and success of the cancer center," Dr. Bondurant said.

While the influence of the cancer center is felt far and wide, it maintains a strong commitment to North Carolina residents. A good example is the Specialized Program of Research Excellence (SPORE), in which scientists conduct basic research into breast cancer causes and mechanisms at the cellular level. In partnership with faculty physicians, these researchers bring about improvements in patient treatment in UNC Hospitals' multi-disciplinary breast cancer clinic.

SPORE also has helped develop new approaches to cancer prevention and early detection in parts of the state where the need is particularly great.

"We have led the way with some of these programs," Dr. Pagano said. "They have benefited the whole country by providing models of how best to do this kind of work."

One such program, carried out in partnership with the UNC School of Public Health, addressed the fact that far fewer African-American women in parts of eastern North Carolina received mammograms than did white women.

"We developed intervention methods that were directed at doctors, at the staffs of doctors' offices and at lay people," Dr. Pagano explained. "These methods included Save Our Sisters, a campaign in which highly respected African-American women carried the message about the importance of mammograms to others in their communities."

"Later, when we looked at the rate of mammograms among these women, we saw a striking improvement."

Legacy of a psychiatry heretic

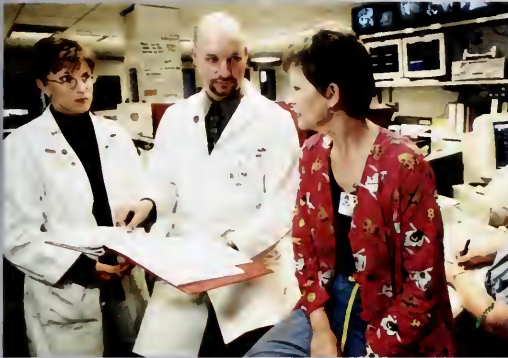
Psychiatry is another arena in which UNC has not only benefited the state but transformed the discipline. The medical school's leadership in psychiatric care began when



A little help at commencement. (1970s)



A familiar scene — class in Berryhill Hall (1980s).



Work done in the N.C. Jaycee Burn Center is a signature service of what UNC Hospitals offers.

Dean Berryhill selected George Ham, MD, as the first chair of the Department of Psychiatry. Dr. Ham was a psychoanalyst, like everyone else of prominence and influence in academic psychiatry at the time.

"But what made him a heretic to some of his colleagues was his radical, rebellious notion that biology was also important," said Robert Golden, MD, the department's current chair. "Today, that is a given, but back then it was enough to get you burned at the stake."

Dr. Ham persevered and built a department that integrated both psychological and biological approaches to mental illness. He also placed a strong emphasis on research.

"From the start, the research component distinguished us from all the other major psychiatric departments in the United States," Dr. Golden said. "Research into the causes and treatments of serious mood disorders really put us on the map, and a number of the breakthrough discoveries made here became woven into everyday practice."

The department now ranks seventh in NIH funding for psychiatry research.

For 50 years, the department has enjoyed a close, mutually supportive partnership with the state Division of Mental Health, Developmental Disabilities and Substance Abuse Services, and the AHEC program has further strengthened that relationship. All UNC psychiatry residents receive some of their training in AHEC community-based sites and at Dorothea

Dix Hospital in Raleigh.

"We pick the cream of the crop from the top medical schools to come here and train," Dr. Golden said. "And because of the experience we give them, many of them choose careers in the public sector in North Carolina."

Leading on many fronts

There are dozens of areas in which UNC is a world leader both in research and clinical care.

For example, UNC physician-scientists led by Richard Boucher, MD, are known worldwide for leading-edge cystic fibrosis research and treatment, and UNC graduate and Morehead Scholar Francis Collins, MD, PhD, was the co-discoverer of the cystic fibrosis gene. UNC's organ transplant program is one of the largest and most successful in the country, offering heart, lung, kidney, liver, pancreas and bone marrow transplants. UNC is the only medical center in the state that performs all types of organ transplants for both adults and children, including the most lung transplants for cystic fibrosis in the world. Stanley Mandel, MD, executive associate dean for clinical affairs and chief of staff of UNC Hospitals, performed the first successful organ transplant at UNC — a kidney procedure — in 1969. ▶



Volunteers have been a part of the hospital since the beginning.



A Burn Center patient gets a bandage tune-up.

"As we developed expertise, we extended it from cadaver kidney transplants to live, related-donor transplants to transplants for high-risk diabetics," Dr. Mandel said. "Based on the success of the kidney program, we added other organs and eventually developed a comprehensive transplant program that is unparalleled in the state."

UNC now ranks in the top 10 nationally in the number of liver transplants.

The North Carolina Jaycee Burn Center is one of the best-known symbols of UNC's commitment to the state.

"The Burn Center is our signature example of mission fulfillment as a public institution that takes all comers, that serves the entire state and specializes in high-end service delivery," said Eric Munson, president and chief executive officer of UNC Hospitals. "People all over the state understand that when there is a disaster and people are badly burned, it is a foregone conclusion that those people will come here."

George Sheldon, MD, Zack D. Owens Professor and former chair of Surgery, said, "Taking care of burns is such a daunting challenge that most doctors don't even want to start. They are glad to have the Burn Center here as a security blanket."

The Burn Center's nationally recognized prevention education program, Learn Not to Burn, has been taught to more than 90 percent of the fourth graders in North Carolina and is credited with having helped save several lives.

A happy marriage; looking ahead

One of the keys to the School of Medicine's success has been the interaction between the basic sciences and clinical medicine.

"The culture that developed here is one in which physicians value scientists and scientists value physicians," said Fred Sparling, MD, who as former chair of both the Department of Microbiology and Immunology and of the Department of Medicine personifies the culture of collaboration. "We have powerful synergies here that grow from our ability and willingness to work with each other."

According to a study published in *Academic Medicine*, UNC is one of only four U.S. universities that rank in the top 15 in both funding for biomedical science and the training of primary care physicians. This finding illustrates the medical school's strong and balanced commitment to discovering new knowledge and caring for people.

"The medical school's solid science base has made it a national leader in finding new ways to improve health care," Dr. Bonduant said. "This represents a huge contribution to the state and an achievement without which the dream of better health and health care could not have been fulfilled."

Molly Broad, president of the University of North Carolina, calls the medical school and hospital "the quintess-

NORTH CAROLINA MEMORIAL HOSPITAL
UNC SCHOOL OF MEDICINE



sential embodiment of the university's mission of teaching, research and public service" and "a priceless resource to the university and the state."

Yet everyone recognizes that the job of fulfilling the dream isn't finished — and never will be. For example, there are still parts of North Carolina where the shortage of physicians remains severe. In 1999, the last year for which statistics are available, 10 N.C. counties had fewer than five physicians per 10,000 people. Three counties — Hyde, Perquimans and Tyrrell — had only two physicians each, while Camden, Gates and Greene counties each had only three physicians.

"Our AHEC program is viewed as one of the best in the country, but there remains a lot to be done in providing rural access to health care," Dean Houpt said. "Also, we must continue to adjust our focus as we look at health indices and health concerns around the state, such as the aging of the population."

Teenage pregnancy, infant mortality, diabetes, obesity and malnutrition are conditions that remain serious problems, Mr. Munson said. "Ill health and maldistribution of health professionals still describes too much of North Carolina."

Overall, though, the quality of health care, access to health care and health status of North Carolinians have improved immensely over the past 50 years. And the School of Medicine has played a crucial role.

Arguably, its greatest impact has been in educating students and training residents who have chosen



It takes a lot of folks — not just caregivers — to keep UNC Hospitals humming smoothly.

to practice in North Carolina. Beginning with the graduation of the first four-year class, the medical school has produced 5,400 new physicians. More than 3,000 physicians — one-fifth of all those currently practicing in North Carolina — are School of Medicine alumni or former UNC Hospitals residents.

About 40 percent of UNC medical graduates remain in the state, as do a large percentage of physicians who complete their residencies here.

"We have trained so many excellent practitioners for the state, and they have had a major role in changing the quality of care," Dr. Sparling said.

If Dr. Berryhill could see the School of Medicine and UNC Hospitals today — how big they have grown and the scope of their service to his beloved state — what would he think?

"He wouldn't be surprised that there has been great change, because he anticipated and laid the groundwork for change," Dr. Bondurant said. "But I think he would be in awe of what has been accomplished." 

Spring Medical Alumni Weekend

Don't miss the Spring Alumni Weekend on April 19-21. The weekend's Continuing Medical Education program will feature the medical center's 50th anniversary symposium, "Exploring Medicine in the Post-Genome World."

Other events will include the Spicer-Breckenridge Memorial Lecture, "Genomics, Medicine and Society," featuring Francis Collins, MD, PhD, director of the National Institute of Human Genome Research. The medical center's Golden Jubilee Gala will include recognition of alumni fund-raising campaigns and a special video presentation. The weekend also will include tours of the new N.C. Children's and Women's Hospitals.

For more information, contact the Medical Alumni Office at (919) 962-8891 or (800) 862-6264.



The lobby of the N.C. Neurosciences Hospital



Groups still gather at the "Brick Beach" outside the original N.C. Memorial Hospital building to enjoy lunch and a bit of fresh air.

A strong focus on women and minorities

"We are viewed as one of the best in recruiting minorities to medical school, but there is still a lot of work ahead," said Jeffrey Houpt, MD, dean of the UNC School of Medicine and chief executive officer of the UNC Health Care System.

There have been years in which the school ranked first in the nation among non-historically black medical schools in the number of African-American graduates. UNC also is a national leader in educating women as physicians

"Addressing the health-related disadvantages of both women and minorities has been one of the great

challenges of the past 50 years," said Dean Emeritus Stuart Bondurant, MD. "Our record is one of substantial accomplishment, and there is no question about the faculty's commitment."

But, like Dean Houpt, he acknowledged that "more needs to be done to provide both women and minorities the full range of health care services appropriate to their needs."

In the mid-1990s, Christopher C. Fordham III, MD, dean emeritus and chancellor emeritus, led the medical school's effort to increase student diversity as part of a national campaign by the Association of American Medical Colleges. "It seems a rather critical element of a just society that people be able to choose

their physician from those who have a background that is somewhat similar to their own, with whom they can best communicate and best share the joys and sorrows of life," he said at the time.

While the medical school has made significant strides in increasing the number of female faculty members, the gains in minority representation have been smaller.

"There have been fewer minority people in the training pipelines to become faculty," Dr. Bondurant said, "so one of the challenges for the future is the development of minority faculty along with completing the job of developing appropriate numbers of women faculty." 



"I have a **passion** for what I do."

The new chair of the Department of Surgery sets high goals for his team – and himself

By Rebekah Butler

"A surgeon's surgeon."

That is a description many believe sums up the new chair of the Department of Surgery, Anthony Meyer, MD, PhD.

Dr. Meyer was appointed the department's chair last summer. Though new to the top position, Dr. Meyer is not new to the department. He began his tenure in Surgery in 1984 as associate professor and director of the Surgical Intensive Care Unit.

"I came to UNC because I thought the opportunities were exceptional," Dr. Meyer pointed out.

They were.

Now, more than 17 years later, Dr. Meyer has served in nearly a dozen different administrative roles and broadly practiced surgery, caring for not only general surgery patients but also cancer, burn and trauma patients. He also has served as director of the surgical intensive care unit, chief of the critical care service for surgery and

associate program director of the department.

In 1990, he was promoted to professor of surgery and in 1997 was appointed to the department's second highest position, vice chair, which was followed by a distinguished professorship in 2000, the Roscoe B.G. Cowper Distinguished Professor of Surgery.

Today, Dr. Meyer also is the general surgery program director, medical director of critical care and assistant director of the N.C. Jaycee Burn Center.

"Dr. Meyer brings an independent, worldview to the department while having the advantage of being an observer and a participant in its development for 17 years," said George Sheldon, MD, Zack D. Owens Distinguished Professor of Surgery and former chair of the department. ■

Typically, Dr. Meyer begins his day at 5 a.m., sorting through mail and e-mail from the previous day. After his meetings, which usually begin at 6 a.m., he either goes to the operating room, the outpatient clinic or to additional meetings. It is not until around 6 p.m. that his day usually concludes.

But the Minnesota native understood long hours well before becoming a surgeon. The fourth of 10 children, Dr. Meyer worked on the Ford assembly lines during the summers to support himself through his undergraduate years at the University of Minnesota. One summer he not only worked on the assembly lines, but also as a custodian at a hospital.

While attending medical school at the University of Chicago, Dr. Meyer also earned a doctorate in immunology and pathology. "I pursued the combined degree because of my interest in research, which still remains today," he said.

Though his research time has decreased with his increasing administrative responsibilities, Dr. Meyer is still involved with research. He is a member of the UNC Lineberger Cancer Center and a research scientist for the Center for Alcohol Studies. Over the last 20 years, his per-



Photos by Brian Strickland

Dr. Meyer, left, in the operating room.



Anthony A. Meyer

Birth date: April 24, 1948

Education: University of Minnesota, BA

University of Chicago, MD, PhD

Wife: Marian

Children: Jennifer and Christine

Personal Interests: Sports, trying to learn golf, and photography

Dr. Meyer attributes much of his success to the support of his family. His wife, Marian, is a certified nurse anesthetist, once working at UNC Hospitals. His oldest daughter, Jennifer, front, is a teacher in Minneapolis, Minn., and his younger daughter, Christine, left, is a student at James Madison University, majoring in geology.

sonal research interests have focused on providing permanent skin replacement for burn patients and identifying the causes of increased susceptibility to infection after injury.

Dr. Meyer's interest in research is evident in the goals he has set for the Department of Surgery, including an expansion of the department's research activity. His other goals for the department include developing

programs that are in line with the strategies of the institution, training residents and helping junior faculty to be successful.

"My vision for the Department of Surgery is to make it the department every academic surgeon and surgical resident wishes they are a part of," he said.

Dr. Meyer continues to stay active in clinic, seeing patients, performing operations and taking night call.

"It's hard for me to be an effective leader of the faculty and residents if I don't stay active clinically, including in the operating room," he explained.

"I try to take care of each patient like I ▶



would like myself or my family treated," Dr. Meyer added. "I tell residents that their plan for a patient should be something they would want for themselves or their family member. Patients want our best and they should not expect any less."

Dr. Meyer's abilities have been recognized nationally. Last year, he was listed among the country's leading medical specialists in "America's Top Doctor's 2001," a book published by Castle Connolly Medical Ltd.

Dr. Meyer also has been honored with countless other awards. He is a University of North Carolina Teaching Scholar and a three-time recipient of the Department of Surgery Teacher of the Year Award, to name a few.

Additionally, Dr. Meyer is known for his participation in many professional organizations. He has served as president of the American Association for the Surgery of Trauma and as a director of the American Board of Surgery. Currently, he serves on the board of directors of the Anesthesia Patient Safety Foundation and on the research advisory board of the Shriners Hospital for Children.

"As the chair of the Department of Surgery, I am working with many others to set expectations and standards for the next generation of surgeons," Dr. Meyer said. "I have a passion for what I do, and the amount of time I spend doing it reflects that passion." 



Special Events



Photos by Dan Crawford

Students recently inducted into the Eugene S. Mayer Community Service Honor Society.



Marcus L. Martin, MD, talks to Christopher C. Fordham, III, MD, following his delivery of the 2002 Zollicoffer Lecture. Dr. Martin is chair of the Department of Emergency Medicine at the University of Virginia. Established in 1981, the Zollicoffer Lecture commemorates more than 40 years of minority presence in the UNC-Chapel Hill School of Medicine. Lawrence Zollicoffer, MD, who died in 1976, was the fourth African-American graduate of the School of Medicine and a founder of the Garwyn Medical Center in Baltimore.



Photos by Brian Strickland

Business After Hours proves successful

In December, UNC Health Care and the Medical Foundation of North Carolina Inc. hosted a Business After Hours event through the Chapel Hill-Carrboro Chamber of Commerce. People turned out in droves for an early peek at the new N.C. Children's and Women's Hospitals.

The **Promise** of **Discovery's** big promise

Organizers believe a lofty new fund-raising campaign will ensure the future of the School of Medicine – and the university

By Bernadette Gillis

Quality students and faculty, along with innovative research and new facilities are all vital to the success of any medical center. Thanks to the School of Medicine and UNC Hospitals' current fund-raising effort, called The Promise of Discovery, the medical center will remain a leader in research and in advancing health care.

The fund-raising campaign is part of Carolina First, a university-wide effort that aims to raise \$1.5 billion in seven years for all UNC schools and programs.

The medical center already has reached over half of its \$300 million goal. Private investments raised by The Promise of Discovery will be allocated among endowment, capital improvements and program funds. "Every gift we receive will be counted toward the campaign," said James Copeland, president of The Medical Foundation of North Carolina Inc. "This is a comprehensive campaign."

The first two and a half years of the campaign, which began in July 1999 and will continue until June 2006, focused

on the leadership phase. "We spent the first part of the campaign talking to our strongest friends," Copeland said. "This has helped us verify our goal."

The medical center's goal is one of the largest in Carolina First, matched only by the College of Arts and Sciences. Originally, the goal was set at \$250 million, but once medical campaign leadership saw that the school was fast approaching its goal, they decided to increase it. "We may have to increase the goal again once we see what kind of progress we're making," Copeland added.

On April 26, the school will enter another phase of the campaign when it formally reveals to the public the progress the campaign has made. On this day the university will have a celebration during which all schools announce their individual results. "The medical center will show donors how successful the campaign has been up to this point," said Jane McNeer, vice president and director of development at The Medical Foundation. "This event will get them excited."

Jeffrey Houpt, MD, dean of the School of Medicine, added, "The campaign will aid the School of Medicine's ability to attract the best students and faculty. The funds certainly will position the school at the forefront in research and medical science."

Once The Promise of Discovery campaign has gone public, the next phase will include a faculty and staff campaign. "Next year, the university will begin its usual annual faculty fund-raising campaign under the Carolina First name," said Speed Hallman, director of development communications.

The Promise of Discovery aims to renew interest and support for centers and programs at the School of Medicine and UNC Hospitals. "This campaign puts a new emphasis on what we're raising dollars for," Copeland said. "It challenges the faculty to sit down and give new life to what we're doing. Also, we want to tell the public that the institution is changing and that we need support for our new set of priorities."

The campaign primarily focuses on genetics and neurosciences, Copeland said. Of the \$300 million the school plans to raise, \$90 million will go to the Institute for Genetic



Jeffrey L. Houpt, MD, dean of the School of Medicine, center, spends a good deal of time promoting The Promise of Discovery campaign.

put your name in lights

Another way the university and School of Medicine can raise money is through named gift opportunities, in which individuals or companies can have different buildings or programs named for someone of their choosing — for a price. Here are a few examples.

School of Medicine	\$100 million
Institute Building	\$20 million
Neuroscience Building	\$7.5 million
Centers	\$5 million to \$15 million
Department chairs and center directors	\$1.5 million
University professorships	\$500,000 minimum
Graduate and postdoctoral fellowships	\$350,000 minimum
Laboratories and research facilities	\$250,000 minimum
Medical scholarships	\$200,000

Medicine. "The area of genetics crosses many areas, such as breast cancer, heart disease and diabetes," Copeland added. "Genetics is all-encompassing."

Aside from genetics, the campaign will benefit these areas as well: the UNC Bowles Center for Alcohol Studies, the UNC Lineberger Comprehensive Cancer Center, Children's Programs, the CF/Pulmonary Research and

ing competitive contracts and grants increases the school's chances of receiving grants from the National Institutes of Health. So the more successful we are at one level, the more successful we are at the next level."

Also, The

Promise of Discovery has made a difference in the amount of funds the medical center has raised over the past few years, Copeland pointed out. "Our numbers have doubled since the campaign began. In fiscal year 2000-01, we received \$52.2 million. We received gifts of \$34 million the year before, and \$25 million the year before that."

So far, the slow economy does not appear to have had an impact on the campaign, Copeland said. "Last year the stock market was down, but giving was up. Overall, the economy didn't affect giving."

However, it is not clear whether the events of Sept. 11 have affected the campaign. "We noticed a little fall since Sept. 11, but we can't say we won't recover," Ms. McNeer said. "The jury is still out. We are, however, working hard to communicate with our donors what a difference their financial support is making."

The Promise of Discovery campaign also will have an impact on the entire university. "The School of Medicine's goal is very important to the success of the Carolina First campaign, just as Carolina First is important to the School of Medicine," Hallman explained.

"The campaign will provide new opportunities for medical school faculty and facilities that the school needs, as well as support its overall excellence and national standing," Hallman added. "A strong show of support will raise the stature and improve the programs at the school. It's a win-win situation for the university and the School of Medicine." 



Treatment Center, the Diabetes Center, the Heart and Vascular Biology Center, the UNC Center for Infectious Diseases, Neuroscience Center, Ophthalmology, Orthopaedics, Surgery and Women's Programs.

Raising funds for these centers and programs is important because state resources are limited, Ms. McNeer said. State support declined from 21 percent of the medical center's budget in 1990 to 11 percent today, and the school's tuition remains among the lowest in the nation.

The campaign also will allow for increased federal resources. "Receiving private investments allows the school to develop new ideas and to apply for public money," Ms. McNeer said. "Our faculty's success in secur-

From personal experience

A longtime Triangle physician who borrowed money to start in medicine is inspired to help future medical students launch their own careers

By Bernadette Gillis

The medical career of Arthur R. Summerlin Jr. MD '46 has been peppered with some pretty significant events. From World War II to the Korean War to the evolution of UNC's four-year medical school to the opening of N.C. Memorial Hospital, Dr. Summerlin has seen a lot of change not just in North Carolina, but throughout the world, too.

Born in Rock Hill, S.C., and reared in Laurinburg, N.C., Dr. Summerlin first became interested in medicine as a child. He said he was inspired by and looked up to both his father, who was a pharmacist, and his Uncle Harry, who was a physician.

But it was his Uncle Harry who helped make his dream of becoming a doctor a reality, Dr. Summerlin said. While a freshman at UNC, his father died and left him with \$900. Dr. Summerlin needed more money to attend medical school, so his uncle loaned him \$2,050 without interest.

"He was a lifesaver to me," he said. "I paid him

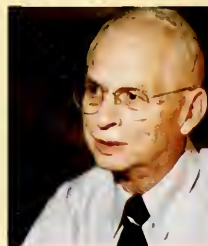
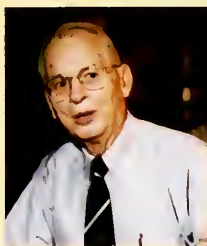
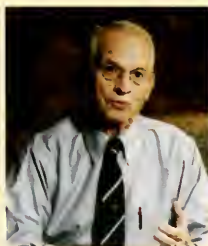
back while I was in military service."

Now retired, Dr. Summerlin said he understands that every medical student is not as fortunate as he was, so in 2001 he created a Loyalty Fund endowed scholarship in his name through the Medical Alumni Endowment Campaign. He created a two-life charitable gift annuity for \$150,000, which will be received after he and his wife have died. Meanwhile, he is making annual gifts of \$5,000 to activate the scholarship during his lifetime. The first student was awarded the need-based scholarship during the 2001-2002 academic year.

"I want to help people get money to go to medical school," Dr. Summerlin said. "I realize how important money is because I had to borrow. I know there are many students who need the money to get an education."

Dr. Summerlin's own educational path to become an obstetrician and gynecologist was shaped by – and interrupted by – his service in the military.

At 16, he entered the Citadel in 1941. However, after his first year there, America entered into





Photos by Brian Strickland

World War II, and most of his classmates went to join the fight. "Everyone left to go to the Second World War, so there was no longer a class at the Citadel." Dr. Summerlin had to continue his education elsewhere.

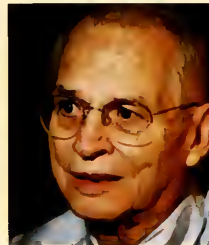
Before leaving the Citadel, he was sworn into the Army Officer's Reserves on Dec. 7, 1942. Then Dr. Summerlin completed his undergraduate studies at UNC and went on to attend the School of Medicine. Because the medical school was a two-year school at the time, he had to transfer to another school.

"I had to choose between the University of

Virginia, Johns Hopkins and a school in Chicago," he said. "Dean Reece Berryhill advised me to go to UVA."

Dr. Summerlin graduated from the University of Virginia School of Medicine in 1948 and went on to Duke University for an internship in internal medicine. While at Duke he entered the Civilian Army Training Program as a first lieutenant.

He said that the internship at Duke made him realize he wanted to specialize in OB/GYN. "I started out wanting to go into family practice like my uncle, but while I was at Duke doing internal medicine, I decided I wasn't



interested in pediatrics. So I changed to OB/GYN."

Having chosen OB/GYN as his specialty, Dr. Summerlin began his residency at the Bowman Gray School of Medicine. Because residents weren't paid a salary by the hospital, the Civilian Army Training Program helped him pay expenses for him and his new wife, Agnes, who were married in 1949. "The hospital paid me \$10 a month. My wife and I got married on my uniform allowance."

By this time, though, America had gone to war again, and his residency at Bowman Gray was put on hold.

In 1950, he was ordered to active duty in the Army Medical Corps at the onset of the Korean War. He served with the 155th Station Hospital in Yokohama, Japan, from July to December 1950. He then was in charge of the Battalion Aid Station



Courtesy of the Summerlin family

Dr. Arthur Summerlin and his wife, Agnes.

with the 89th Tank Battalion of the 25th Division in Korea until the spring of 1951.

"I had an aid station and four aid men," he said. "We would take care of the wounded and evacuate them back to MASH units or the station hospital in Korea."

Dr. Summerlin returned to Japan because of a knee injury and resumed duties at the 155th Station Hospital until January 1952, when he headed to the United States. "It was good to return home," he said, "because while I was away, my first daughter was born. She was 13 months old when I first saw her."

After serving in the orthopedics department at Camp Gordon, Ga., until June 20, 1952, Dr. Summerlin was ready to complete his residency in OB/GYN and decided to return to North Carolina.

In 1952, UNC was undergoing some monumental changes. The School of Medicine had just become a

Wife: Agnes Cochrane Summerlin, married since Aug. 27, 1949

Children: Susan S. Goodmon, Arthur Rogers Summerlin, III, MD, Stephen Cochrane Summerlin, William Mark Summerlin (deceased) and Rosemary S. Perry

Grandchildren: Louis Fletcher Goodmon, Laura Agnes Summerlin, Stephen Lee Summerlin, William Matthew Summerlin, Kelly Welsh Summerlin, Leslie Caylin Spear, Harold Arthur Spear and Luke Ashton Perry

Personal interests: Golf, gardening, fishing and hunting

four-year degree-granting medical school. Construction on the new N.C. Memorial Hospital was underway. And Dr. Summerlin became the first three-year resident in the newly established Department of Obstetrics and Gynecology. He said he was proud and excited to be a part of UNC's history.

"I can remember when they built the hospital. We all really thought it was something. I was very fortunate to be there at that time."

Once Dr. Summerlin completed his residency, he devoted the next four decades to making an impact on health care in Wake County.

In 1955, he went into practice with Dr. Paul Simpson in Raleigh. Shortly thereafter Dr. Simpson retired, and Dr. Summerlin went into practice with Dr. P. J. McElrath and remained with him until Dr. McElrath died 22 years later. Dr. Summerlin said he decided to limit his practice to gynecology. "After he died, practicing obstetrics just wasn't the same," Dr. Summerlin said.

Aside from his private practice, Dr. Summerlin became a leader in influencing and shaping several hospitals in Wake County. He served as president of the medical staff, chairman of the executive committee and chief of the OB/GYN department at Rex Hospital.

Also, in the late 1950s, he served as chairman of staff at Saint Agnes Hospital, which is now Saint Augustine's College. At the time, the hospital was the only hospital in the Raleigh area that admitted black patients. Dr. Summerlin believed it was time for Wake Medical Center to admit all patients.

"I persuaded them at Saint Agnes to move their department of OB/GYN to Wake Medical Center," Dr. Summerlin recalled. "I got the patients from Saint Agnes to go to deliver at Wake Medical Center. It was a good change." Eventually, Saint Agnes closed, and all patients

could be seen at Wake.

Throughout his career, Dr. Summerlin took a special interest in the training of medical students. He was appointed the first chair of the OB/GYN department at Wake Medical Center. And in 1961, he was the primary organizer of the affiliation of house staff and medical students for training in OB/GYN at Wake.

"I persuaded Dr. Robert A. Ross, who was the chair of OB/GYN at UNC, to allow us to have medical students at Wake Medical Center," Dr. Summerlin said. "I got

that program started because we had more deliveries and gynecologic surgeries than they had at UNC."

He watched the relationship between UNC and Wake Medical Center grow. "Many house officers at UNC went through

training at Wake Medical Center. Today, they still rotate house officers from UNC to WakeMed."

Dr. Summerlin, who was actively involved in the training of house officers at UNC and WakeMed, said the quality of training improved during his tenure. "The education of the house officers is different now than it used to be when I was training them. The training is better now that they have computerized the way of teaching. It's really fascinating."

After 51 years of medical practice, Dr. Summerlin retired in June 1999, but he said he still has contact with many of his former patients. "Some of them still come to me for advice," he said. "I am most proud of my patients. I miss them a lot." 🏠

"I want to help people get money to go to medical school. I realize how important money is because I had to borrow. I know there are many students who need the money to get an education."

Dr. Summerlin

A home away from home

Organizers kick off fund-raising effort to provide a place of refuge for transplant, cancer patients and families

By Rebekah Butler

Karen Allen knows a part of UNC Hospitals that few people do. Not wanting to leave her husband's side, Mrs. Allen spent many nights on the waiting room floor trying to claim the rest she needed to be strong for her husband, a two-time kidney transplant recipient.

Unfortunately, Mrs. Allen's experience is not rare. Often, faced with both emotional and financial stress, the loved ones of transplant and cancer patients have nowhere to turn. Their homes are too far away to travel to and from daily, the hospital motel frequently is full and hotels are simply too expensive for some families.

It is a hardship that Mrs. Allen, a resident of Clayton, N.C., not only knows from personal experience, but also sees weekly when she and her husband, Charles, volunteer on the transplant floor at UNC Hospitals. Paula Johnson, another transplant volunteer, witnesses the same rigor, as does Tammy Howerton, section manager for abdominal transplant surgery.

To relieve some of the stress felt by families, Mrs. Allen, Ms. Howerton and Mrs. Johnson have joined together in an effort to build a facility where transplant and cancer patients and families can stay while receiving treatment at UNC Hospitals. The "home away from home," called Family House, will provide affordable

housing to adult patients and families much like the well-known Ronald McDonald Houses do for pediatric patients and families.

The idea for a facility for adult transplant and cancer patients and their families is not a new one. Similar facilities are operated in conjunction with Emory University Hospital and the University of Pittsburgh Medical Center. Physicians and administrators at UNC Hospitals had recognized the need for such a facility for some time, but the resources did not exist to establish it.

Inspired by their individual experiences to build such a facility, Mrs. Allen and Mrs. Johnson were introduced to one another by transplant surgeon, Mark Johnson, MD, who is Mrs. Allen's husband's transplant

surgeon and Mrs. Johnson's son.

The project began in the fall of 2000. The first task undertaken by the organizers was a visit to the University of Pittsburgh Medical Center's Family House, the facilities that inspired the name for Chapel Hill's Family House.

"The feeling that you get from the homes in Pittsburgh was

exactly what I wished was available to me in Chapel Hill when Charles was so sick. Family House is like an emotional and physical retreat to go to after a long, stressful day at the hospital," Mrs. Allen said.

After their Pittsburgh trip, the three women were committed to setting up a similar facility for UNC Hospitals, designating themselves as the development committee. They also asked Bob Johnson, Mrs. Johnson's husband, to serve on the committee because of his background in business and management.

The group envisions a structure boasting 20 to

"We have designed Family House to meet the needs of the families and give them an environment of tranquil peace and beauty in their time of stress."

Paula Johnson

25 bedrooms with private bathrooms, making the facility safe for immuno-suppressed patients. It also will have community living areas including a living room, kitchen, dining area, library, activity room, exercise room, laundry room and outdoor patio.



Dr. Johnson

"We have designed Family House to meet the needs of the families and give them an environment of tranquil peace and beauty in their time of stress," Mrs. Johnson explained.

With the help of Dr. Johnson and Jeffrey Fair, MD, chief of abdominal transplant surgery, the group has laid the foundation for making Family House a reality. They have received the endorsement of UNC Hospitals and have been given permission by the university to lease property for the facility beside the Ronald McDonald House, which is about a mile from the medical center. They also have

incorporated Family House as a nonprofit corporation by the state and have been given nonprofit status by the federal government.

Patients and families who live at least an hour away from UNC Hospitals will be allowed to stay at Family House. A sliding scale fee will be used to determine how much guests are charged. The target cost is \$35 a night with some guests staying free of charge.

Staff will include an executive director, house manager, night manager and part-time personnel. And since it is a nonprofit organization, a board of directors will oversee things, including Drs. Johnson and Fair.

"Dr. Fair and our son are able to offer us a viewpoint that the rest of us often don't understand," Mrs. Johnson said.

Now the fund-raising gets under way. The organizers estimate Family House will cost between \$3.5 and \$4 million, and their goal is to break ground in late 2003. So far, the project has received some small individual and corporate donations. Last summer, the group organized a yard sale fundraiser, and plans currently are being made for a cookbook, which will be sold for \$18 each. But the group is still looking for a major fundraiser and sponsor for the project. 



The facility is expected to boast up to 25 bedrooms with private bathrooms.



Movin' in

The N.C. Children's and Women's Hospitals see their first patients following a military-precise relocation effort

By Bernadette Gillis

Moving into a new facility typically requires lots of planning and manpower. But the move into the N.C. Children's and Women's Hospitals proved a Herculean undertaking involving the support of faculty and staff from more than 20 departments.

The move was a carefully planned process that was carried out over six weeks. The offices of Admitting and Registration and Patient Relations were the first to move into the new buildings Feb. 18, and the first patient moved in Feb. 23. "The move schedule ranged over a month and a half," said Barbara Edson, move coordinator. "The last department to move was Radiology."

Determining when each department would relocate was based on which departments were dependent upon one another. Valerie Parisi, MD, MPH, Robert A. Ross Professor and chair of obstetrics and gynecology, said coordinating with other departments was key in the move of Women's Services.

"All of our functions in Women's Services are interfaced with Children's Services, Family Medicine, Radiology, Anesthesiology, Emergency and Nursing across the whole hospital," she said. "We couldn't move without them

because we're all tied together."

The services provided in the new hospitals include Gynecologic Oncology Inpatient and Outpatient, the Maternity Care Center and Newborn Nursery, Labor and Delivery, all children's inpatient beds, the Newborn Critical Care Center, a new Children's Intermediate Cardiac Care Unit, six new OR and PACU suites for women and children, Children's Outpatient and Women's Outpatient, the Hospital School, Children's Recreational Therapy, Children's PT/OT, Patient Relations and Radiology. Other departments providing support services to these new facilities with satellite locations in the new buildings include Pharmacy and Admitting and Registration.

Plant Engineering played an important role in coordinating the move of all the departments. Steve Bryant, facility construction engineer, said, "Plant Engineering assisted the various departments in relocation of equipment and miscellaneous items. We had plumbers, electricians and other trades folks ready to assist in any way."

Nursing staffs in each department determined when the patients would move. "On the night before the move, the nurses assessed the acuity of the patients," Ms. Edson said. "Then they identified and prioritized the patients' move."

Coming up with a plan to actually move patients into the new hospitals was a challenge for the staff, said Carolyn Viali, RN, MSN, clinical nursing director for Children's Services. "Pediatric Inpatient Services had extra

staff to run two units simultaneously as we moved patients from the current facility to the new facility," she added. "We moved two critical care areas, which had the most complex types of patients."

The nurses alone weren't responsible for coordinating the patients' move. Other departments, including UNC Air Care and Ground Transport Services, helped transport patients and provided support.

"The Patient Relations staff, Spanish interpreters and several others increased their presence during the move," said Jenny Spry, RN, move coordinator. "There wasn't just one person involved."

The move required a team effort primarily to ensure that the hospitals provided safe, uninterrupted service to all patients, said Andrea Woosley, RN, move coordinator. "Each unit's move was planned to diminish the impact on ongoing patient care."

Alan Stiles, MD, Brewer Distinguished Professor and chair of pediatrics, said, "We wanted to disrupt the care of patients as little as possible. We picked move times to minimize disruption of inpatient and clinic activities, doubled staffed and then moved

"The move required a team effort primarily to ensure that the hospitals provided safe, uninterrupted service to all patients."

Andrea Woosley, RN

the inpatients over a very short time period."

Dr. Parisi added, "All of this was done to keep patient safety first."

Other preparations to provide continuous care included everything from making sure the phlebotomists knew when they could draw blood from the patients who were moving to making sure telephone lines worked.

The Nutrition and Food Services staff provided food for staff and patients moving into the new buildings in addition to those in the old facility. The nursing staff and others had to inform patients' family members on where patients were being moved. The move also required extra security to help with things like securing the elevators.

"Everyone who provides services within the hospital was involved, including respiratory therapy, the code team and guest services," Ms. Edson said. "This was a huge effort by the whole institution."

However, before any patient or piece of equipment could be moved, faculty and staff throughout the institution had to go through 200 hours of training, said Linda Bryant, RN. "Staff had to take classes on the new nurse call system and on fire safety. They also had to take tours so they would know how to get around the buildings."

Ms. Viall said all of the staff training has paid off now that the move is complete. "The staff did a great job in learning how to operate new equipment and the layouts of the new units. Some even had to learn new aspects of patient care as we developed a new unit in the Children's Hospital." 



Photos by Brian Stockland

Marian Abernathy and her newborn, Celie, helped open the new N.C. Women's Hospital in February. Opposite page, Valerie Parisi, MD, chair of the Department of Obstetrics and Gynecology, offers input on moving.

UNC research center to receive \$16 million from EPA

UNC's Center for Environmental Medicine and Lung Biology will receive up to \$16 million over five years through a cooperative agreement with the U.S. Environmental Protection Agency. The new funding marks the latest in a succession of such cooperative agreements during the last 21 years between the center and the EPA.

Through the agreement, UNC and EPA scientists in the Human Studies Division, which is located on the UNC campus, collaborate closely on a variety of studies examining the health effects of exposure to air pollutants on healthy human volunteers, as well as volunteers who have illnesses. These pollutants include carbon monoxide, ozone, sulfur dioxide, oxides of nitrogen and fine particulate matter.

The agreement gives the Center for Environmental Medicine and Lung Biology continued access to unique EPA exposure facilities at UNC and helps recruit additional UNC faculty and students to participate in air pollution research.

"We're also very interested in certain airborne materials not regulated by EPA, but which nevertheless are clinically important," said center director Philip Bromberg, MD., Bonner professor of pulmonary and allied diseases. "These include allergens and endotoxin, which is produced by many bacteria and found in homes as well as a variety of occupational settings, such as a swine confinement facility. Endotoxin is also of great interest because some of its mechanisms of action, including its cellular receptor and associated signal transduction pathways, have been elucidated recently."

Endotoxin is an important pro-inflammatory stimulant of the innate immune system.

Dr. Bromberg, who helped establish the center in 1979 along with Albert Collier, MD, of the Department of Pediatrics, said its focus is to tease out the mechanisms responsible for health effects caused by air pollutants. Such data may be used for population health risk assessments by EPA, but formal risk assessment is not a major center objective.

"We support public health policy that's based on solid science. Our job is to do and publish the science," Dr. Bromberg said.

During the past few years, the center's research has examined heart as well as lung problems associated with exposure to airborne particulate matter.

BRAIN PROTEIN TIED TO SLEEP AND FEEDING ALSO INVOLVED IN BODILY SENSATIONS

A brain protein linked to narcolepsy — the sudden, uncontrollable and inexplicable onset of sleep — helps regulate bodily sensations.

Exactly how that protein, hypocretin-2, is involved in narcolepsy remains unclear. Indications are that people and animals exhibiting narcoleptic symptoms are deficient in this protein or the molecular receptor to which it attaches. But the new findings by UNC and Yale University neuroscientists may open a door to the answer. Their report was the cover story for the Jan. 15

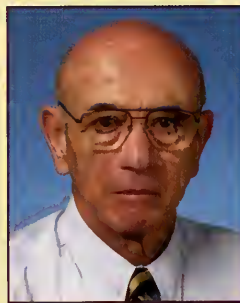
issue of the *Journal of Physiology*.

Edward R. Perl, MD, professor of cell and molecular physiology and the report's corresponding co-author, said hypocretin peptides are distributed widely throughout the brain. They arise from part of the hypothalamus, a region prominently involved in regulation of the autonomic nervous system, endocrine activity, and mood and motivational states. Recently, these proteins have been implicated in the regulation of behaviors associated with arousal, such as feeding and sleep.

The protein the researchers tested was hypocretin-2, which specifically targets the cell receptor associated with narcolepsy. The effects they found were complex.

Hypocretin-2 excited a subset of nerve cells in the outermost cell layers in the spinal dorsal horn, and apparently these neurons, in turn, inhibited activity of other neurons, "as if a complex re-setting of the apparatus that was receiving sensory input from the body is modulated by hypocretin," Dr. Perl said.

"Our presumption from these observations is that when neurons distributing hypocretin-2 become active, this produces a suppression of activity in certain neurons associated with pain and temperature sensation," he said.



Dr. Edward R. Perl, professor of cell and molecular physiology in the School of Medicine

Dr. Perl is no stranger to pain research. He was first to document the existence of nociceptors, sensory fibers specialized by tissue damage and their relation to the pain sensation.

"This is the first report on the effects of hypocretin

on the spinal cord neurones," Dr. Perl said.

It may be that a decrease of the protein "helps people sleep and minimizes attention to minor inputs. Conversely, an increase helps a person to continue to do an essential function like eating even when there are minor inputs from the peripheral nervous system, such as occurs when one sits on a rough edge," he said.

The implications for narcolepsy remain hypothetical, he added. "The link at this stage is circumstantial. But it does suggest there's a mechanism connecting what keeps us behaviorally awake to modulation of sensory input from the body. We've uncovered a piece of that mechanism."

Co-authors with Dr. Perl were Timothy J. Grudt, PhD, of UNC and Anthony N. van den Pol, PhD, of Yale University School of Medicine. Study funding came from the National Institute of Neurological Disorders and Stroke, part of the National Institutes of Health.

NEW LIGHT ON MOLECULAR SWITCH THAT TURNS GENES OFF

New research in yeast cells may have pinpointed a key enzyme in the molecular circuitry that silences genes.

The new enzyme, Set2, could prove critical for helping regulate gene expression in the ordered cycle of growth and division common to all living cells that have a nucleus. Thus, it may play an important role throughout life, beginning with early development, in gene regulation.

The research could also have consequences for the design of new targeted treatments for human diseases, including cancer, according to Brian D. Strahl, PhD, UNC assistant professor of biochemistry and biophysics. Dr. Strahl, the report's principal author, conducted the study while a postdoctoral researcher in the University of Virginia laboratory of senior co-author C. David Allis, PhD.

"The findings add to our knowledge of a basic and very important process and could offer new insight as to why certain genes in cancer are inappropriately expressed and how that might be corrected," Strahl said.

The new report is published in the March 2002 edition of the journal *Molecular and Cellular Biology*.

The process referred to by Dr. Strahl involves chromatin, a multifolded, ribbon-like complex of DNA wrapped around histone proteins. This class of proteins is one of the most highly conserved, appearing in all organisms having nucleated cells. While chromatin packaging allows for efficient storage of genetic information, it also impedes access to DNA by transcription factors, proteins that regulate gene expression.

Among the biochemical modification mechanisms that can dynamically change chromatin's structure — its loosening or tightening — is histone methylation. This modification mainly occurs on lysine residues, one of the amino acids that comprise the tail region of histone molecules.

Recent research at UNC and elsewhere has linked gene silencing, or deactivation, to methylation of particular lysines on the amino acid tail of the histone H3 molecule.

"The identity of any enzyme responsible for this

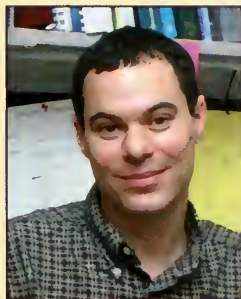
modification was unknown until a few years ago when the first lysine 9-specific histone methyltransferase was identified," said Yi Zhang, PhD, a UNC biochemistry colleague of Strahl's. In December 2001, Zhang reported (in *Molecular Cell*) having identified the enzyme Set7, which modifies lysine 4 on histone H3 in mammalian cells. By methylating H3 at lysine 4, Set7 makes the chromatin structure more open, so other proteins can access the gene.

In the latest study, Strahl and co-authors described the identification and characterization of Set2, a novel histone methyltransferase that is site-specific for lysine 36 of the H3 tail. Set2 is responsible for methylation at this site. However, the researchers noted that in doing so "it helps to repress or silence gene transcription." Thus, according to Strahl, Set2 might be "a co-regulator of transcription" in the sense that it turns genes "off" instead of "on" as in the case of Set7.

"During development, you have different sets of genes that are important for, say, limb formation, and when the limbs are completed, the genes responsible for them must be turned off," Set2 may thus represent an "off switch" for gene regulation in cells.

In addition, Strahl said this modification could be part of an emerging 'molecular code' of histone modifications that ultimately regulate these processes.

This study was supported by grants from the National Institutes of Health.



Dr. Brian D. Strahl, UNC assistant professor of biochemistry and biophysics



Emanuel F. Petricoin, Ph.D. (far left) delivered the Ralph R. Landes Lecture on "Clinical Proteomics: Applications at the Bedside" as part of the 34th Annual Student Research Day. Dr. Petricoin is joined by John Graham, MD, (center) and members of the John B. Graham Student Research Society.

UNC Dance Marathon raises \$122,209 for the N.C. Children's Hospital

The annual UNC Dance Marathon was held Feb. 22-23 with 577 dancers standing on their feet for 24 hours in support of the children at the N.C. Children's Hospital. More than 400 student volunteers, hundreds of spectators and many more silent auction bidders also were in Fetzer Gymnasium to support the dancers in this great effort.

Organized by a 160-member committee, the Dance Marathon is the largest student-operated fundraising event on the UNC campus.

Proceeds from the event go to the "For the Kids Fund," which was created to allow the UNC Dance Marathon to give directly to the families and patients of the Children's Hospital. The fund was established by the Dance Marathon in 2000 to include the marathon's entire annual fundraising total and helps families cover costs not associated with Medicaid or insurance.

The Dance Marathon also receives tremendous support from corporate sponsors.



Students boogie in Fetzer Gymnasium as the UNC Dance Marathon boosts the coffers of the N.C. Children's Hospital.



Photos by Brian Strickland

Retired OB/GYN physician endows professorship

Joseph W. Baggett, MD '43, a retired OB/GYN physician in Fayetteville, N.C., has pledged \$333,000 to establish an endowed professorship for the Department of Neurology.

"I intend to honor this pledge during my lifetime but have also made a codicil to my will if it is not completed in my lifetime," Dr. Baggett said. His gift will be matched by the State of North Carolina through The Distinguished Professors Endowment Trust Fund, bringing the total to \$500,000, the financial minimum to establish a professorship at the University of North Carolina.

The name of the endowed professorship will be The Joseph and Hannah Baggett Distinguished Endowed Professorship in Neurology. The person named to the Baggett Professorship will have a research interest in Parkinson's disease and movement disorders.

"This professorship will be a major contribution to the care of patients with Parkinson's disease for many generations to come. Dr. Baggett's gift constitutes a major contribution to our efforts to better understand this disease and someday eliminate its disabling symptoms altogether," said Frank M. Longo, MD, PhD, the H. Houston Merritt Professor and chair of the Department of Neurology.

New scholarship honors parents

Raymond V. Yokeley Jr. of St. Petersburg, Fla., died July 26, 2001. He provided an endowment to benefit UNC medical student scholarships for generations to come.

The Raymond V. and Maude Sink Yokeley Scholarships honor the memory of his parents. Yokeley's father was a physician in the Thomasville and Lexington area.

Yokeley was an only child and attended UNC in 1937. He was a member of Kappa Sigma Fraternity and served in World War II. He then worked with a bank in Thomasville for 15 years before serving the College of Charleston for 20 years in student affairs and public relations. After moving to Florida, he worked with Riddle Aeronautical College, managing its world accounts. Yokeley then moved to St. Petersburg, where he volunteered, played tennis and worked until his death.

In 1997, Yokeley created a charitable gift annuity to ultimately establish the scholarship endowment with a contribution of \$400,000. In addition to that sum, The Medical Foundation of North Carolina Inc. has received another \$430,000 from his estate to be added to the endowment. The earnings from the endowment will provide scholarship awards for medical students at UNC, with a preference for qualified students from Davidson County, N.C.

20s

Herman F. Easom, CMED '25, lives alone in a town home in Wilson. He regularly attends church, Sunday school and his coffee club. Herman also still drives but only locally.

40s

R.A. McLemore, CMED '42, is a retired general surgeon. He lives in Springfield, Ohio, where he follows the Tar Heels faithfully.

60s

Kel Cohen, MD '63, is a professor and chairman emeritus at Virginia Commonwealth University. Although he is semi-retired, he is still doing NIH research. In addition, he has started a company that makes surgical related matrix materials.

Dave M. Davis, MD '63, is director of the Piedmont Psychiatric Clinic in Atlanta. He recently attended the Metropolitan Opera in New York City with **Ira Hardy, MD**, and **Charles Sawyer, MD**, both of the class of 1963.

James L. Parker, MD '63, is in a group pathology practice, mainly working at Frye Regional Medical Center in Hickory. He has been at Frye Regional Medical Center for 32 years, where he has served as chief of staff and chair of the board. Currently, he is on the advisory board. His wife, Mary Alice, enjoys Lake Hickory and a small garden. He says that medicine remains too interesting to retire.

80s

Phillip Dickey, MD '83, is an associate clinical professor at Yale University School of Medicine. He was recently named associate chief of neurosurgery at Yale-New Haven Medical Center.

Ruric Anderson, MD '89, and his wife, Holly, welcomed the birth of their second son, Carson Jacob, Sept. 29, 2001. Carson joins Parker Fredrich who turns 2 in April.

90s

Dipak Ranparia, MD '92, works at St. Thomas Hospital in Nashville, Tenn., as an interventional radiologist.

Lisa Rietz Yanase, MD '94, and her husband, Craig, celebrated the birth of their first child, Lauren Reiko, in October. Dr. Yanase is

medical director of the Cerebrovascular Center at LDS Hospital in Salt Lake City, Utah. Last year, she began to develop a stroke center at the regional tertiary referral center. Most recently, her hospital served as the medical center for the 2002 Olympic Winter Games.

2000s

Steve Oljeski, MD '00, is a radiology resident in Boston, Mass. He is engaged to Laura Ferretti of Erie, Pa. They are getting married in May in Erie, after which they are going on a honeymoon to the island of St. Lucia.

Deaths

Fletcher S. Sluder, Jr., CMED '36, died in December. He lived in Asheville, N.C. His specialty was obstetrics.

James B. Greenwood, Jr., CMED '43, died in January. He lived in Charlotte, N.C. His specialty was internal medicine.

William F. Hutson, CMED '43, died in April 2001. He lived in Northbrook, Ill. His specialty was radiology.

Robert M. Packer, CMED '43, died in October. He lived in Waycross, Ga. His specialty was endocrinology.

John R. Pender, III, CMED '45, died in December. He lived in Charlotte, N.C. His specialty was general surgery.

Robert F. Hooks, Sr., MD '58, died in January. He lived in Atlantic Beach, Fla. His specialty was ophthalmology.

Doris B. Braxton, MD '59, died in December. She lived in Burlington, N.C. Her specialty was pediatrics.

Marvin M. McCall III, MD '56, died Feb. 3. He was 70. Dr. McCall, a former president of the Medical Alumni Association, spent most of his career working at Charlotte Memorial Hospital, which later became Carolinas Medical Center. Over his career, Dr. McCall dedicated himself to teaching internal medicine and was just last year awarded the Medical Alumni Association's Distinguished Service Award for his commitment to training other doctors. Dr. McCall partially retired from his duties at Carolinas Medical Center in 1995 and was, until his death, a clinical professor in the UNC Department of Internal Medicine.

alumni

JAMES M. ANDERSON, MD, PHD, has accepted the position of chair of the Department of Cell and Molecular Physiology, effective July 1, 2002. Anderson is currently a professor of internal medicine and cell biology at Yale University School of Medicine.

EVAN ASHKIN, MD, clinical assistant professor of family medicine, received a Teaching Excellence Award and was voted "Teacher of the Year" by the residents for 2000-2001.

CHRISTOPHER C. BAKER, MD, associate chair and chief of the trauma and critical care division, was co-author of a study that described selective aortic arch perfusion (SAAP) as a potentially effective way to pump an oxygen-carrying fluid into the aorta. A report of the still-experimental procedure was published in a recent issue of *Critical Care Medicine*.



BAKER

WILLIAM DAVIS, PHD, research associate professor of cell and molecular physiology, recently was awarded a Teaching Excellence Award.

JAMES FABER, PHD, professor of cell and molecular physiology, recently was awarded a Teaching Excellence Award.

RICHARD L. GOLDBERG, PHD, research assistant professor of Biomedical Engineering, recently received the 2001 Teaching Excellence Award.

ADAM GOLDSTEIN, MD, assistant professor of family medicine, was asked to be on the National Board of Directors of Maccabiah Israel/USA. The organization is one of the largest Jewish organizations in the world whose purpose is to bring young Jewish athletes, ages 13 to 18, from across the world to compete against each other in Olympic style sports every two years in Latin America and every four years in Israel.

ANDY HANNAPEL, MD, clinical assistant professor and director of family practice inpatient service, recently received a Teaching Excellence Award.

Dr. Hannapel led a reorganization of the teaching in that service area.

MARGARET HELTON, MD, clinical associate professor and director of maternal and child health recently received a Teaching Excellence Award.



HELTON

ALAN HOWE, MD, research assistant professor of pharmacology, was recently awarded the National Cancer Institute's Howard Temin Award for his developmental research on the growth and movement of cancerous cells.

Dr. Howe, previously a postdoctoral fellow at UNC Lineberger Comprehensive Cancer Center, is working to find a way to stop the spread of cancer in the body by studying the way cellular growth and movement are influenced by a cell's surroundings. The award is a five-year grant set up to allow the scientist to work in a mentored setting for up to three years and in their own lab after that.

STEPHEN B. KNISLEY, PHD, associate professor of biomedical engineering and medicine, recently became a member of the editorial board of the *Journal of Cardiovascular Electrophysiology*.

JOSEPH LEE, MD, professor and chair of radiology, was appointed as a sub-panel chair for the NIH State-of-the-Science Conference on the Management of the Clinically Inapparent Adrenal Mass ("Incidentaloma").

MELVIN LEVINE, MD, professor of pediatrics and director of the UNC Clinical Center for the Study of Development and Learning, recently was featured on a national broadcast of a PBS/WGBH documentary. The topic was children with learning disabilities.

LEE MCILWAIN, PHD, professor of cell and molecular physiology, recently was awarded a Teaching Excellence Award.

CHAPMAN T. MCQUEEN, MD, assistant professor of otolaryngology/head and neck surgery, was

among 1,787 initiates from around the world who became Fellows of the American College of Surgeons during convocation ceremonies at the college's recent 87th annual Clinical Congress in New Orleans. The American College of Surgeons is the largest organization of surgeons in the world.



MCQUEEN

PAUL LEE MOLINA, MD, associate professor of cardiopulmonary, received the Teaching Excellence Award for 2001-2002 and is a nationwide finalist for ACGME's Parker J. Palmer "Courage to Teach" Award for 2001-2002.

MARGARET NUSBAUM, DO, clinical assistant professor and co-residency director of family medicine, received a Teaching Excellence Award for leading the ongoing development of the curriculum.

CAM PATTERSON, MD, associate professor of medicine, who joined the faculty of the division of cardiology in 2000, has been named director of the newly formed Carolina Cardiovascular Biology Center. The National Institutes of Health awarded Dr. Patterson, who is a member of the editorial board of *Circulation*, two R01 grants totaling more than \$2 million.

The goal of the Carolina Cardiovascular Biology Center is to understand the causes of and devise new therapies for heart disease and stroke using state-of-the-art biomedical technologies. The center is particularly interested in addressing cardiovascular problems that are of concern to the UNC community.

MICHAEL D. PECK, MD, SCD, director of the N.C. Jaycee Burn Center, recently attended a meeting entitled Research Development Consensus Conference in Leesburg, Va. The meeting was sponsored by the American Burn Association and by the Agency for Health Care Research and Quality. The purpose was to develop an agenda for measurement of outcomes in pediatric burn patients. A summary report will be published in the *Journal of Burn Care and Rehabilitation*.

EDWARD R. PERL, MD, Sarah Graham Kenan professor of cell and molecular physiology, recently endowed a \$10,000 national prize to be awarded annually for an outstanding scientific contribution to neuroscience. Dr. Perl endowed the prize to draw attention to UNC's strengths in neuroscience and to pay tribute to the university.



ROBERTS

HAROLD R. ROBERTS, MD, founding director for the UNC Center for Thrombosis and Hemostasis and Sarah Graham Kenan professor of medicine and pathology, recently received the American Society of Hematology's Henry M. Stratton Medal.

Through this award, the society honored Dr. Roberts for his inter-

nationally recognized contributions to hematology. Dr. Roberts was the first U.S. physician to treat hemophilia patients with factor VIII, a medication that has proven extremely successful in treating hemophilia patients not responding to older or other products.

RICHARD SEMELKA, MD, professor of radiology and vice chair for clinical research, received an NIEHS grant of \$135,000 for "Uterine Leiomyoma Longitudinal Intervention Study (ULLIS) Dynamics of Leiomyoma Growth."

GEORGE F. SHELDON, MD, outgoing chair of the Association of American Medical Colleges, recently addressed conference attendees at the organization's annual meeting in Washington, D.C. He spoke on current and future physician work force trends.

SUSAN S. SMYTH, MD, assistant professor in the division of cardiology, received a Junior Faculty Scholar Award from the American Society of Hematology to study the role of P-selectin in platelet-platelet interactions and thrombus formation.

MAHESH A. VARIA, MD, professor and vice chair of radiation oncology, recently participated in a medical camp and house reconstruction project in the Kutch region of India, which was hit by a massive earthquake a year ago.

TONY G. WALDROP, PHD, has accepted a position as vice chancellor for research and graduate studies with a faculty appointment in cell and molecular physiology. Dr. Waldrop earned three degrees from UNC, one of which was a doctorate in physiology in 1981.

Correction: In the *Winter 2002 issue*, the title of Jeffrey Sonis, MD, was incorrectly listed as clinical assistant professor of family medicine. His correct titles are assistant professor of social medicine and assistant professor of family medicine.



Alumni are approaching a momentous occasion this year: the 50th anniversary of N.C. Memorial Hospital, as well as the School of Medicine's 50th year as a four-year degree-granting institution.

Fifty years ago, Dr. Reece Berryhill wrote, "If medicine is in truth a learned profession and not a trade, and if it has finally become, after a long and somewhat devious course, a university discipline, then it is logical to believe that a school of medicine whenever possible should be an integral part of a university, physically and spiritually."

And so began the construction of a 400-bed hospital and an outpatient clinic, as well as a 100-bed tuberculosis unit with buildings for nurses and resident staff, in a small community of 10,000 permanent residents and more than 7,000 students.

Would we today have the courage and foresight to initiate such a glorious project? Genius always thinks outside of the box.

Five decades later, we are entering a new paradigm for conducting business and advocating for our patients. We are moving from a boutique to a corporate industry. Socioeconomic pressures are forcing the solo practitioner to give up his or her independence for the security of group practice. Government regulators and managed care bureaucracy are wedged between patients and physicians. We now need sophisticated business acumen to negotiate contracts that seem to always favor more margin for the managed care companies and less bottom line for our practice.

I sense greater frustration at a health care system which no longer values dedication, persistence and quality of care by the physician. Contracts are awarded not to those who give the best care, but to those who will capitulate to the lowest bid of the managed care company. The rules of economics apply to medicine as to any industry, and until our medical profession collectively — the medical schools and training programs in the United States — recognize the leverage of supply and demand, the government and third party payers will continue their relentless drive to lower provider fees. The crisis over malpractice reform continues with little progress made toward tort reform in our state. I predict this one issue will force the premature retirement of many mature specialists in the next few years.

How can we continue to attract the best and brightest to give up the best decade of their lives to obtain the skill and training necessary to care for our patient population if we, as a profession, allow Medicare and managed care to denigrate the value of our skilled services? These are questions that beg leadership for our profession, which has been sadly lacking over the past decade.

'Nuff said about the present state of medicine. As alumni, we have enjoyed many years of practice prior to the present system. We can concentrate on how our generation can leave a legacy, and I firmly believe we can make a difference. Just think how different our university would be today without the generosity, wisdom and foresight of John Motley Morehead, for example.

I have been involved with fundraising at our medical school for the past decade and have talked with many of you about giving back. I see different responses: some write a check, others' eyes simply glaze over, and still others go on a diatribe about their son's or daughter's failure to obtain admission to undergraduate or medical school.

We are not economic "big hitters" — we have been able to live a comfortable lifestyle and educate our children. None of us will be that elusive anonymous donor who gives \$25 million to the medical school. But as members of an alumni association, we can make a huge difference.

There is something within us that blossoms when we give ourselves in support of others. We do this every day in practicing medicine, and we can do the same by giving financial support to our medical school. In the past decade, our alumni have given over \$15 million back to our medical school. That is a tremendous amount of financial help to students and our institution.

I am, as Dr. Berryhill envisioned, connected spiritually to my medical school, and I hope those of you who take the time to read these words are connected similarly. If so, consider the many ways you can give financial support. I promise you will feel better about yourself and about our wonderful profession.

Thomas J. Koontz

Thomas J. Koontz, MD, '66

Speak up!

To better serve its readers, the *Bulletin* wants to know more about its audience

As we hope you already have noticed, the Medical Alumni Bulletin recently has undergone a major overhaul. The publication has a whole new look and feel, with more color photos and graphics, a bolder design and a broader approach to subject matter. But we're not done. And we want your help. We are conducting the survey below to better understand our audience and what it is you like — and don't like — about the Bulletin. This will help us gear the magazine's features to our readers' preferences and plan content we hope you will find insightful, relevant and entertaining. Please take a moment to answer these questions, tear out the pages and mail them in the envelope enclosed in this issue.

Thank you.

Which of the following describes how you usually read the *Medical Alumni Bulletin*?

- ☐ Read it cover to cover ☐ Skim all of it ☐ Read articles that catch your interest
☐ Don't read anything in the *Bulletin*

What section do you turn to first?

- ☐ Cover story ☐ Alumni notes ☐ Dean's letter ☐ Research news
☐ CME/Alumni calendar ☐ Development news ☐ Table of Contents ☐ Varies from issue to issue

How often do you read the following regular departments/sections of the *Bulletin*?

	<u>Almost Always</u>	<u>Frequently</u>	<u>Sometimes</u>	<u>Rarely</u>
From the Dean	☐	☐	☐	☐
From the President	☐	☐	☐	☐
Cover story	☐	☐	☐	☐
Alumni news	☐	☐	☐	☐
Research news	☐	☐	☐	☐
Faculty news	☐	☐	☐	☐
Development news	☐	☐	☐	☐
CME/Alumni calendar	☐	☐	☐	☐

Of the four issues of the *Bulletin* published each year, how many on average do you read or browse through?

- ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ None

How many of the past four issues of the *Bulletin* do you still have? ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ None

Do you consider the length of the feature articles to be: ☐ Too long ☐ Too short ☐ Just about right

Please indicate your preference in regard to each of the following topics.

	<u>Like a lot</u>	<u>Like somewhat</u>	<u>Doesn't Interest Me</u>
Alumni profiles	☐	☐	☐
Faculty profiles	☐	☐	☐
Stories about ongoing research	☐	☐	☐
Stories about medical students	☐	☐	☐
Current issues affecting medicine	☐	☐	☐
History/nostalgia about medical school	☐	☐	☐
Stories about department activities	☐	☐	☐

Other: _____

How do you compare the new design of the *Bulletin* with its previous layout style?

- ☐ Like the new look better ☐ Like the old look better ☐ No preference

How interested would you be in reading a personal essay column about the "School of Medicine Years" written by a different alumnus(a) each issue?

- ☐ Very interested ☐ Somewhat interested ☐ Not interested

Does the *Bulletin* fulfill your need for knowledge about what is taking place at the UNC School of Medicine? ☐ Yes ☐ No (How not?)

What are some topics you would like covered in an upcoming issue of the *Bulletin*?

In what state do you reside? _____

To which of the following do you have access? (Please check all that apply) ☐ Computer ☐ E-mail ☐ World Wide Web

Have you visited the Web sites of: UNC Health Care ☐ Yes ☐ No

The Medical Foundation of N.C. ☐ Yes ☐ No

UNC School of Medicine ☐ Yes ☐ No

Medical Alumni Association ☐ Yes ☐ No

Would you be interested in an online version of the *Bulletin*? ☐ Yes ☐ No

About how many times have you visited Chapel Hill in the past year? ☐ 1-5 times

☐ 6-10 times

☐ More than 10 times

☐ Live in or near Chapel Hill

☐ Only for School of Medicine events

☐ Only for athletic events

☐ None

Your gender: ☐ Male ☐ Female

In what year were you born? _____

Please indicate your current marital status ☐ Single, never married

☐ Married

☐ Divorced

☐ Widowed

How many children under 18 live in your home? _____

April 5-6 – Chapel Hill

Symposium on Tissue Factor and Factor VII

April 10-12 – Chapel Hill

26th Annual Internal Medicine Conference

April 17 – Chapel Hill

Emergency Medicine Research Forum

April 19-20 – Chapel Hill

Spring Alumni Weekend/Medical Center 50th Anniversary Celebration: Genetics and Genomics

May 1-2 – Washington, D.C.

Otitis Media

May 4-5 – Chapel Hill

17th Annual Meeting of the Glomerular Disease Collaborative Network

May 12-15 – Chapel Hill

All Kinds of Minds: Promoting Student Success

May 13 – Chapel Hill

HIV Care 2002

June 15 – Chapel Hill

Medicolegal Seminar

June 20-23 – Amelia Island, Fla.

Carolina Refresher Lectures 2, 3, 4

July 19-21 – Amelia Island, Fla.

Heart Failure Management

For more information, go to

www.med.unc.edu/alumni and

www.med.unc.edu/cme.

Estate Planning Notice

Many individuals would like to make a major gift to the UNC medical center, but cannot commit current assets for such a purpose. Through a will, however, anyone can make a more significant gift than they might ever have thought possible by designating a specific sum, a percentage, or the residue of their estate for the benefit of the medical center.

To provide a bequest, simply include a paragraph in your will naming The Medical Foundation of North Carolina, Inc. as a beneficiary. For example:

"I give, devise and bequeath (the sum of \$ _____) or (_____ % of my estate) or (the residue of my estate) to The Medical Foundation of North Carolina, Inc., a 501(C)(3) created to maintain funds for the UNC medical center with principal offices located at 880 Airport Road, Chapel Hill, North Carolina."

This language creates an unrestricted bequest for use by the medical center when and where the need is greatest, or you may specify that your gift be used for a particular purpose.

For further information on bequests, contact Jane McNeer at (919) 966-1201, (800) 962-2543, or jmcneer@email.unc.edu.

We want to hear from you . . .

The *Medical Alumni Bulletin* would like to hear from you about our publication and the stories we publish. Selected letters could appear in print in a new "From Our Readers" page. The *Bulletin* editor reserves the right to edit for clarity and space considerations only.

Please submit your letters to: *Medical Alumni Bulletin* Editor, UNC Health Care, 101 Manning Drive, Suite 6002 East Wing, Chapel Hill, N.C., 27514 or fax to (919) 966-6207 or e-mail LWooten@unch.unc.edu.

Anonymous letters will not be published and submission does not guarantee publication. You should include your name, address and daytime telephone number. Addresses and phone numbers will not be published.

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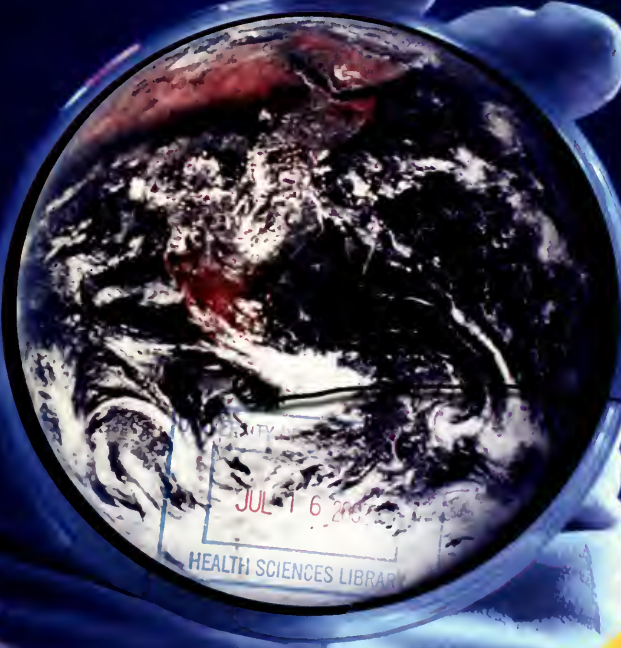


Medical Alumni Bulletin

School of Medicine, University of North Carolina at Chapel Hill

Spanning THE Globe

UNC fights infectious diseases
in more places than you realize



A night to remember:
The big 50th anniversary gala

Norma Berryhill





Each year several widely varied organizations issue rankings of graduate schools — including medical schools — and hospitals in the United States. It seems likely that we will see more and more of these. In the last couple of years, at least two publishers that had never issued such rankings before began to do so, and based major marketing campaigns on their rankings. The cynical view is that rankings are intended to sell newspapers. However, this is also evidence that society wants to have some way of measuring health care outcomes.

Perhaps the best known of such rankings, at least to the general public, are those generated by *U.S. News & World Report*. Now other popular general-interest magazines, such as the AARP's *Modern Maturity*, are getting in on the act by issuing rankings of their own. Meanwhile, faculty at the University of North Carolina at Chapel Hill School of Medicine generally pay more attention to how well we fare compared to other schools in terms of winning research funding from the National Institutes of Health.

In March, the NIH released figures showing that researchers in the School of Medicine received \$180 million in research grants during the 2001 calendar year. This was an increase of \$27 million in funding over the previous year, and the School of Medicine earned a ranking of 14th nationwide.

The week after the NIH announcement, *Modern Maturity* released a list of what it said were the 50 top hospitals in the United States. UNC Hospitals was No. 18 on that list, ranked more highly than any other hospital in North Carolina. This was the first time AARP had ever produced such rankings.

Then in April, *U.S. News & World Report* issued its ranking of graduate and specialty programs, which included medical schools. UNC's School of Medicine received recognition in eight categories. The school was ranked third for rural medicine, fourth for family medicine and sixth for primary care overall. Other categories in which we ranked in the top 25 were research overall (22nd), women's health (11th), AIDS (16th), internal medicine (18th) and pediatrics (19th).

U.S. News also publishes a top hospitals list each summer, and UNC Hospitals is always well represented on that list. On the 2001 list — the latest one available at the time of this writing — 10 medical specialties offered at UNC Hospitals ranked among the top 50 programs of their kind nationwide. The 2002 list is slated for release in July, and I expect that UNC Hospitals will once again make a strong showing.

Another list of the top 50 hospitals is now being compiled annually by the publisher Castle Connolly Medical Ltd. In mid-April, Castle Connolly began shipping the second edition of a book titled *America's Top Doctors*. Fifty-two School of Medicine faculty were listed in the book, a showing that placed UNC Hospitals at No. 18 in Castle Connolly's list of the top 50 hospitals by doctor count. Our faculty fared similarly well in the book's first edition, which was published in 2001.

I personally do not use these rankings to evaluate our school or hospital. I base my evaluation on:

- When we recruit faculty, who are our competitors? That is, is the prospective faculty member being sought by other prestigious schools, and do we win a share of these competitions? The same criteria are applied to residents and students.
- Is there evidence that we're always trying to improve? Excellence is striving, not a destination.
- Do we have areas of excellence that others wish to emulate? Do people want to come here to learn how we do it?

From my office I have a notion of the answer to the foregoing questions. I do not need a national survey. On the other hand, the rather constant mention of our school in these surveys confirms that the rest of society recognizes us as among the best. We should be very proud of that.

Jeffrey L. Houpt, MD
Dean, School of Medicine
Vice Chancellor for Medical Affairs
CEO, UNC Health Care System

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on the cover



A quarter century after launching its infectious disease initiative, UNC is at the forefront of fighting infectious disease – locally and far-flung corners of the globe.

(Cover photos by Brian Strickland.)

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Here, there and everywhere

After 20 years, UNC's work in infectious diseases is having a profound impact locally and around the globe

By Eleanor Lee Yates

Last year when Charles van der Horst, MD, was in the small African country of Malawi working at an HIV clinic, he watched a skit performed enthusiastically by villagers. They danced, sang and said a prayer. Through a translator van der Horst learned that the villagers, part of an AIDS support organization, were giving thanks for the foreigner who had traveled so far to bring medicine and help to them.

Such outreach is not a first for UNC.

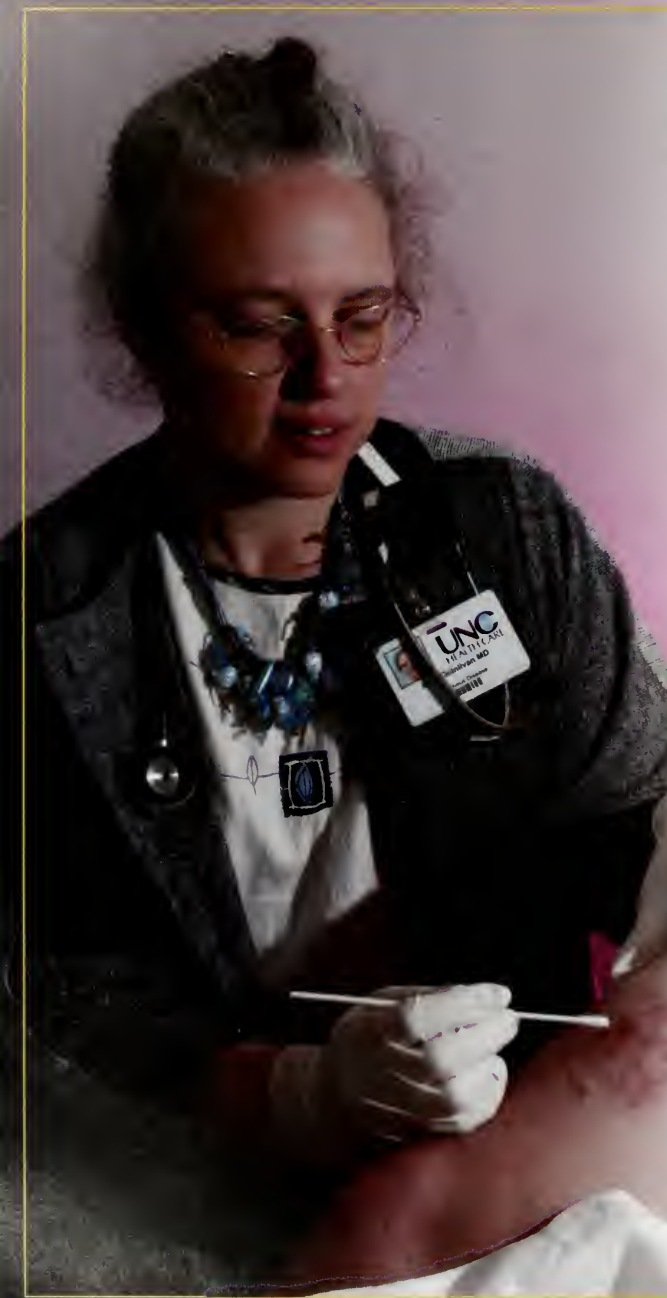
Whether at a clinic for sexually transmitted disease at Central Prison in Raleigh or an HIV clinic on the African island of Madagascar, the research and clinical efforts of doctors and scientists of UNC's Division of Infectious Diseases are making vital contributions at a time when infectious diseases are once again a major health concern. Globalization has brought new concerns about infectious diseases in other countries.

Also, there is still an alarming increase in STDs in certain populations and areas. The AIDS epidemic has diminished somewhat in the United States but still rages in many parts of the world.

"UNC is both reactive and proactive," said Myron (Mike) Cohen, MD, J. Herbert Bate Professor of Medicine, Microbiology and Immunology, Chief of the Division of Infectious Diseases and Director of the UNC Center for Infectious Diseases. "Today there are so many emerging pathogens. There are new bugs, changing microbes, resistant bugs and changes in host defenses."

UNC is among the nation's leading institutions researching the evolution, treatment and prevention of infectious diseases. From a handful of physician scientists focused primarily on sexually transmitted diseases in the 1970s, the Division has spawned a sprawling network of experts within a more comprehensive Center for Infectious Disease, which was founded just two years ago. Investigators are housed throughout Health Sciences in the Schools of Medicine, Public Health, Pharmacy, Nursing and Dentistry and throughout the UNC Campus. The Center's outreach and research includes STD and HIV treatments in the Wake and Durham County Health Departments, North Carolina Central Prison and around the globe to Russia, China and especially Africa.

The nationally acclaimed UNC AIDS Treatment and Research Unit treats 20 percent of the HIV patients





UNC clinics abroad attract patients and visitors.

in North Carolina. Meanwhile, scientists work on vaccine development that will ease suffering and slow death rates in resource limited Third World countries. Infectious disease researchers at UNC receive more than \$25 million a year in grants from the Centers for Disease Control and Prevention, the National Institutes of Health and other agencies and foundations.

As the threat of bioterrorism increases throughout the world, UNC is becoming well known for its expertise in this area, as well. UNC was recently tapped by the U.S. Department of Health and Human Services as one of 15 national Centers for Public Health Preparedness.

"There was a time in late 1970s that most people in medicine felt like we'd dealt with infectious diseases effectively, and it was time to turn our attention elsewhere. But it's clear now, with all these infection problems, such as the E. coli bacteria and Ebola virus, there are old and new threats to human health," said William L. Roper, MD, MPH, Dean of the UNC School of Public Health.

Dr. Roper is a former director of the CDC. His arrival at UNC five years ago put even more luster on the university's reputation for work in infectious diseases. "We need to advance the ability to protect against and treat infectious diseases. This requires a lot of different skills. The work we do in public health is a logical and important counterpart to being partners and colleagues within the Center for Infectious Diseases," Dr. Roper pointed out.

Infectious Disease Pioneers

The Division of Infectious Diseases was blessed with a particularly strong foundation. Dr. William Cromartie, MD, was the first UNC infectious disease pioneer back in the 1950s, along with the respected clinician Janet Fischer, MD. The 1960s saw the arrival of Joseph Pagano, MD, and Frederick Sparling, MD. Dr. Sparling came to UNC from the CDC.

"I didn't have a very glamorous job at CDC and didn't have much to do. So I taught myself and began studying STDs," said Dr. Sparling, longtime director of UNC's STD Cooperative Research Center.

Even back then, UNC embraced the tradition of joint appointments of physician scientists in basic science departments. Dr. Sparling had a joint appointment in Medicine and Bacteriology. His research in gonococcal iron metabolism has led to new ideas for vaccine development. Dr. Sparling went on to chair both UNC's Department of Microbiology and Immunology and Department of Medicine.

From his early research of oncogenic viruses, Dr. Pagano founded the UNC Lineberger Comprehensive Cancer Center. His work on the Epstein-Barr virus won international accolades. Today, he continues his research in Lineberger.

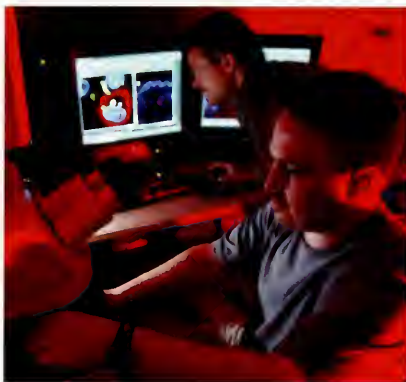
Virologist Shannon Kenney, MD, continues the pace set by Dr. Pagano.

"Only a few viruses cause cancer. The people who get lymphoma have immune systems which don't work well. Although there is an increasingly recognized association of viruses with cancers, it's still controversial," Dr. Kenney said. She and her colleagues are developing novel treatments of EBV using the virus itself to kill the tumor. Research with mice has proven successful, and clinical trials are being initiated on patients with AIDS-related lymphomas.

"UNC believes strongly in translational researchers who are able to understand the basics of molecular experiments but who also have clinical training to convert novel therapies," Dr. Kenney said. "It's hard to find people like this because it takes a long time to train competent physician scientists. Usually there's a lot of pressure on physicians to see patients."

This increasing trend of physician-scientists is one Dr. Cohen has helped nurture. It was also under his aegis that the Center for Infectious Diseases evolved.

"It's taken a lot to make this happen. The scope of this is staggering," said Dr. Sparling. "Mike Cohen has the energy, the drive and the talent. He has great people skills and knows how to bring out the best in people."



Graduate student Robert Fulcher, front, and Tom Kawula, PhD, back, associate professor in the Department of Microbiology and Immunology, use a 31 Digital Deconvolution Microscope, which allows optical sectioning of specimens. Using the microscope, Fulcher and Dr. Kawula, a member of UNC's Center for Infectious Disease, view a bacterium, *Haemophilus ducreyi*, inside infected cells and identify the type of cells that the bacteria are able to infect.

UNC ABROAD

The threat of infectious disease is often worse in other lands, and UNC is there to learn – and help

Alumni assume that cutting-edge research on infectious diseases takes place in the myriad laboratories tucked away in the buildings that ring the UNC medical center. But far, far away, scientists and physicians are doing valuable research on sexually transmitted diseases and HIV, tuberculosis, and malaria in Malawi, Nigeria, Nepal, India, Mexico, China, Russia and other countries.

UNC's international infectious disease presence came about after successful research on HIV during the 1980s, and it has increased through the years.

"There was pressure to take our domestic programs overseas," said Myron S. Cohen, MD, Chief of the Division of Infectious Diseases. UNC first provided technical assistance in Malawi in the early 1990s. Malawi, a former British colony in Africa, has a population of 10 million people. Malawi is one of the poorest countries in the world, where HIV, tuberculosis and malaria are major infectious disease risks. Almost 25 percent of urban adults are infected with HIV, and news of the virus has traditionally been regarded as a death sentence.

In 1997, UNC's site in Malawi became one of the National Institutes of Health's 17 international sites in the HIV Prevention Trials Network. Dubbed the UNC Project, it works in collaboration with Lilongwe Central Hospital in the country's capital. More than 150 doctors, nurses, lab technicians, data managers and others, most of whom are Malawian, work at the UNC Project.

According to Irving Hoffman, PA, MPH, Director of International Operations, approximately 5,000 patients visit the clinic each year, with about 3,000 receiving antibiotics. "The health facilities in Malawi are very basic. Because people have so little money the demand for public health care services is great," he said. "People are often very sick and hungry, but they are a very proud, polite and non-complaining society."

In addition to saving lives, the UNC Project is also conducting valuable research. Biological HIV prevention trials are taking place on mother-to-child HIV transmissions, STD control and antiretroviral therapy. Research also is being done on the relationship between HIV and STDs.

A grant from the Pediatric AIDS Foundation makes it possible to provide HIV testing and counseling for pregnant women. Women can receive medical treatment to reduce the risk of HIV transmission to their babies. They also are counseled on ways to reduce HIV transmission through breast milk.

Some clinic patients who test positive for HIV are referred to the Lilongwe Central Hospital HIV primary care clinic for long-term follow-up. UNC helps support the clinic with personnel, supplies and medication and passes on research information to the Malawi Ministry of Health.

"We are becoming a community presence. They count on our clinical care. There is so much suffering taking place and so many are dying," Hoffman said.

UNC fellows in infectious diseases get the opportunity to rotate through the UNC Project, where they learn about tropical medicine and pursue a research interest. PhD students in public health epidemiology can participate in clinical trials and select a dissertation topic. Each summer

Dr. Sparling hired Dr. Cohen in 1980 as an Assistant Professor. Through the years, Dr. Cohen became internationally known for his research in transmission and prevention of



From left, Robin Ryder, MD, MPH, Charles van der Horst, MD, Myron S. Cohen, MD, Jeffrey Frelinger, PhD, and Ronald Swanstrom, PhD.

transmission of STDs, including HIV.

UNC's early research in STDs helped establish the medical school as one of the top centers of expertise in this area. In 1987, UNC received its first award as an NIH Cooperative STD Research Center grant to study pathogens and vaccine development, one of only six such centers in the nation. This grant strengthened UNC's involvement in the community through STD Clinics in the Wake and Durham County Health Departments.

UNC entered into a partnership in 1998 with the N.C. Department of Corrections to treat its HIV population. According to Becky Stephenson, MD, Co-Director of the project, clinicians provide care for 500 to 700 inmates. About two-thirds of the inmates are seen at Central Prison in Raleigh. Some are at the McCain Correctional Institution near Aberdeen or at other facilities.

"Between visits, outreach nurses hired by the prison see the prisoners. Most of the patients are doing very well," Dr. Stephenson said. "But there's the issue of continuity of care when they leave. The prisons set up appointments but many people are homeless and don't follow through. Many are substance abusers. Most have very poor access to health care."

two first-year medical students from UNC observe clinical and lab procedures in Malawi.

Grants from the NIH Fogarty Inter-national Center help Malawian doctors, lab technicians, clinical officers and nurses travel to Chapel Hill for training.

UNC also works with an STD clinic in Beijing, China, where Dr. Cohen is the main consultant. Because of a growing HIV problem there, UNC provides HIV lab research, help to scientists who do epidemiology, and some HIV clinical care.

In addition, UNC has two large clinics and labs on the island of Madagascar under the direction of Wilfreida Behets, PhD, MPH, Associate Professor of Medicine and Epidemiology. UNC overseas syphilis research there and provides support to the government for STD and HIV prevention projects.

Another overseas presence is in St. Petersburg, Russia, where a growing drug problem is giving rise to HIV. UNC helps to support a large clinic and research center there, at which researchers study ways to stop HIV through drug use. There is also a counseling center for drug users.

UNC infectious disease experts have ties with other

countries, too.

"In Mexico, we designed better ways to treat STD through a program supported by USAID," Hoffman said. In Egypt, another USAID project helped determine if HIV and STD were major health problems.

While UNC's foreign efforts provide humanitarian aid, they also earn a berth among a handful of other universities also on the cutting edge of infectious disease research.

UNC's Infectious Disease Clinics Around the World



AIDS heartbreak

UNC saw its first patients with AIDS in 1981. "HIV quickly became a global problem," Dr. Cohen recalled. "But it was like a 900-pound gorilla no one knew how to move. There were no procedures in place." He and colleagues tried applying the principles of their work with STD to HIV.

"We realized that HIV had some of the same biological principles as STDs," he said.

In 1986, UNC was awarded one of the country's first NIH-sponsored AIDS Clinical Trials Units. Joseph Eron, MD, now heads the AIDS Treatment and Research Unit. Dr. Charles van der Horst directed the Unit from its inception until January 2002. "It was awful. There wasn't much we could do for the patients. There were no good therapies," Dr. van der Horst said. "I went from funeral to funeral and memorial service to memorial service."

In the 1980s UNC Hospitals developed an in-

patient ward service and full-time outpatient clinic to provide care to patients with HIV and AIDs, and these services continue today. Because patients come to UNC from a very wide geographical parallel AIDS clinics were started in hospitals in Winston-Salem, Greensboro, Asheboro and the Robeson County Health Department.

Because of its successful work in domestic outreach programs, UNC was poised to bring its resources overseas. In 1989, UNC made its foray into global infectious disease research, partnering with Family Health International in the International AIDS Control program (AIDSCAP). Researchers and clinicians began working in Malawi in 1992. This African country is one of the poorest nations in the world and has a debilitating HIV problem.

Irving Hoffman, PA, MPH, is Director of International Operations for what is now called "The UNC Project in Malawi." The UNC Project has more than 150 employees, including several full-time faculty members.

In 1997 UNC was awarded an NIH HIV Prevention Trials Network (HPTN) site in Malawi, broadening research, clinical care and training opportunities. This project is conducted through collaboration with the 1000-bed Lilongwe Central Hospital.

In 1996, UNC was named the NIH STD Clinical Trials Unit for the United States, putting in place the infrastructure for more global translational STD research.

UNC has a presence in many parts of the world, including Cameroon, Madagascar, Russia, Brazil, Mexico, Haiti, China as well as other countries.

Research expansion

Today, UNC's Center for AIDS Research (CFAR), directed by Ron Swanstrom, PhD, Professor of Microbiology and Biochemistry, coordinates clinical and behavioral research and research in HIV virology and pathogenesis. Partners include Family Health International and the Research Triangle Institute.

"The CFAR coordinates broad research on campus," Dr. Swanstrom said. "It's the infrastructure center for several 'Cores' critical to AIDS research at UNC. The Clinical Core and Virology Core allow researchers to get samples and data from research other than their own." The Pharmacology Core shares drug level information. Behavioral science experts study how well a population can take drugs.

UNC also continues to produce breakthroughs in preventing infectious disease. Dr. Swanstrom, along with colleagues, devised a vaccine prototype from an HIV strain in South Africa. For the past two years Robert Johnston, PhD, a UNC Professor of Microbiology and Immunology, has successfully shepherded a vaccine prototype into trials and has secured private backing for the vaccine. The company he founded, AlphaVax Inc., is based in Research Triangle Park and has 40 employees. This summer brings much anticipation as the HIV vaccine prototype goes into NIH sponsored human trials.

"It costs a lot of money to get a vaccine to clinical trials. Large drug companies normally develop drugs for commercial use. This could have dead-ended," Dr. Johnston said. Instead, innovative partnering helped raise money for the trials. Dr. Johnston hopes vaccine technology will ease vast problems in the Third World. In the Republic of South Africa, for example, there are 1,500 new cases of HIV a day.

Dr. Johnston has seen first-hand people suffering from HIV, but also from Rift Valley fever, dengue fever and viruses those in the West have not heard of. Commercial drug giants typically don't focus on diseases in faraway lands, he said. But if unchecked, diseases such as dengue fever could be all too familiar to Americans one day. Rift Valley fever, confined primarily to northeast Africa, is one of the NIH's high-priority potential agents for a bioterrorism act.

Also, UNC is associated with the International AIDS Vaccine Initiative, begun by the Rockefeller Foundation but supported by an array of non-profit organizations such as the Bill and Melinda Gates Foundation.

Jeffrey A. Frelinger, PhD, Kenan Professor and Chair, Microbiology and Immunology, has watched his Department grow steadily to 32 scientists since his arrival in 1983. He counts off some current research projects, including work by Jack Griffith, PhD, on Duchenne muscular dystrophy and the replication of DNA, research by Jenny Ting, PhD, on how proteins in the body recognize foreign disease, and a premier study of gonorrhea led by Janne Cannon, PhD. The laboratory of Susan Fiscus, PhD, is responsible for cutting-edge work with antiretroviral drugs, and Roland Tisch, PhD, is doing research on a protein identified in Type 1 diabetes.

"Our Department's role is to provide the fundamental science underpinnings. We are interested in the biology of



From left, E. Byrd Quinlivan, MD, Lynda L. Bell, MSN, RN-C, FNP, and Susan E. Wilson, RN, MSN, FNP-C, are among some of the faculty who care for patients in UNC Hospitals' Infectious Diseases Clinic.

infectious agents and the response of the hosts," Dr. Frelinger said. "During the last 50 years, UNC scientists have tried to understand model systems. There's the feeling that we have the big picture. Now it's time to respond and move to the next level."

Dr. Frelinger is among many who praise the collaborative and openly supportive environment at UNC. The creation of a Center for Infectious Diseases has not only strengthened research but further encouraged camaraderie, too.

"A lot of places have institutional barriers. Here, those barriers are invisible. I think that's a factor that keeps people here. People don't often leave," Dr. Frelinger said.

Dr. Cohen gets across-the-board credit for his work in helping erase barriers and building bridges to the School of Public Health.

"The culture here isn't about turf; it's collaboration instead of competition.

Physician scientists do a little of this and a little of that and need to be in supportive environments to prosper," said Dr. Sparling.

"There is not a lot of competition among investigators here. You know, there's enough science to go around for everyone. I think our corporate culture has been cultivated by Dr. Cohen. And I think that attitude is unique among universities," Mr. Hoffman added.

Now that the clinical, research and public health aspects of infectious diseases are bonded beneath the umbrella of the Center for Infectious Diseases, it would seem logical that the scientists and doctors parceled out among five buildings would be housed together. This will indeed become a reality within the next couple of years. The Center may be housed within the School of Public Health or in a renovated portion of the School of Medicine.

Having scientists and doctors who research, treat and prevent infectious diseases working in closer proximity — while expanding around the globe, at the same time — is an outgrowth of 20 years of collaboration, Dr. Cohen pointed out.

And just another milestone in an unswerving mission. 

ON ALERT

With the threat of bioterrorism higher than ever before, UNC is busy preparing for the possibility of a medical disaster

When a Florida man was diagnosed with anthrax last fall, officials at the Centers for Disease Control and Prevention immediately called officials in North Carolina. The patient had recently visited the Tar Heel state, and the CDC needed information — quickly.

Working with the UNC schools of Public Health and Medicine and the N.C. Department of Health and Human Services, the center got what it needed.

The UNC School of Public Health is a critical part of the UNC Center for Infectious Diseases. Its researchers have long been valuable sources in national health care issues.

But following the Sept. 11 attacks and anthrax scares, UNC is now on the national forefront in readying the public's health care workforce to respond to terrorist incidents and emerging health threats.

UNC has one of 15 schools of public health selected to be Centers for Public Health Preparedness by the CDC. According to Robin Ryder, MD, MPH, Professor of Epidemiology and Medicine who heads North Carolina's center, this network will improve the nation's infrastructure in responding quickly to threats and emergencies.

"These are a way for the CDC to reach out and help our nation get ready for the next anthrax scare or another infectious disease crisis," Dr. Ryder said.

The North Carolina Center for Public Health Preparedness, which is based at UNC, serves as a regional center for North Carolina, Virginia, West Virginia, South Carolina and Tennessee. U.S. Health and Human Services Secretary Tommy Thompson announced the centers, which are funded with \$20 million this year in federal money, in February. The package is part of the \$2.9 billion bioterrorism appropriations signed by President Bush in January.

Dr. Ryder said the center would work closely with state and local agencies, school and community health partners.

"State health departments don't train as much as we do. North Carolina came to us and

asked us to train people to promote bio-preparedness," he said.

The center is helping to organize teams throughout the seven already established Hazardous Materials (HazMat) regions of the state. Teams include physicians, epidemiologists, industrial hygienists, administrators and others. UNC faculty (Drs. Ariene Sena, Michael Blocker, Heidi Swygard) serve as the team responsible for Durham, Wake, Orange and eight other adjacent counties.

The teams are trained in surveillance of bioterrorism, symptoms of disease and in rapid response.

"We're talking about a cluster of patients becoming ill, about epidemics. The infrastructure is already there with the HazMat regions. We're trying to upgrade and modernize," Dr. Ryder said.

Most counties in North Carolina would not see bioterrorism, he said. "But we have to be on call. Teams will use the same skills of vigilance they already use for food-borne diseases, but will expand their knowledge."

The Center for Public Health Preparedness is creating some strange bedfellows, bringing together doctors, firemen, FBI agents and EMT workers, along with an array of health department officials.

Dr. Ryder's own background includes front-line intervention with HIV. He spent two years in the Democratic Republic of the Congo, identifying those with high risk of HIV.

"We learned from Sept. 11 and the anthrax scare about the hazard of bioterrorism to our population," said William Roper, Dean of the School of Public Health. Physicians and others in the frontline of defense must be trained to handle these diseases. People need to learn how to report suspicious illnesses."

Currently, classes and other outreach activities are taking place in North Carolina and other states that train doctors, nurses, fire departments, EMT workers and others in bioterrorism responses.

Dr. Roper sees the preparedness centers as another aspect of the mission of the School for Public Health.

"Our four themes are protecting against threats to the healthy, empowering those to lead the healthy, improving health services and preparing leaders to advance these themes," he said. 



Dr. Winkenwerder goes to Washington

UNC alumni takes the reigns of the military's health care needs

By Bernadette Gillis

Many physicians make it their mission to make a difference in patient care, either in a clinical setting or through lab research. Bill Winkenwerder Jr., MD, MBA, '81, who said he has always had an interest in the business side of medicine and in health policy, has devoted his career to improving patients' lives, not in an exam room or in a lab, but as a manager, working with clinicians, administrators and policy makers.

Through his work over the years with various private companies and the federal government, Dr. Winkenwerder has become a leader in improving health care for millions of people.

Trained as an internist, Dr. Winkenwerder is the assistant secretary of defense for health affairs and is responsible for managing the U.S. military's health care system, called TRICARE. The system provides care for active duty members and their families, as well as military veterans and their dependents, which together totals around 8.5 million people. Also, Dr. Winkenwerder oversees the operation of 75 hospitals and 400 medical clinics.



Dr. Winkenwerder, right, started his new job at the Pentagon shortly after the Sept. 11 terrorist attacks.

Bill Winkenwerder Jr., MD, MBA. '81

Wife: Pride, married for 15 years

Children: Will, 10 years old

Hometown: Asheville, N.C.

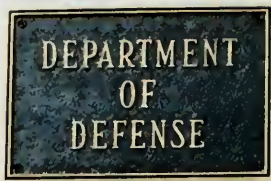
Personal Interests: Playing golf, spending time with family, traveling, watching sports (especially ACC basketball).

ics within the TRICARE system and serves as senior health advisor to Defense Secretary Donald Rumsfeld.

"Our challenge is to improve the service and quality of TRICARE while managing its cost," he said. "The program budget is \$25 billion for this year, and it continues to grow as the cost of health care goes up. It is important to be able to provide the highest quality of care and great service."

Aside from managing the cost of care provided to the military, Dr. Winkenwerder also is faced with the challenge of ensuring the health and safety of troops deployed overseas. "Our service members have done an incredible job in Afghanistan. We have a sophisticated system of medical support there to take care of our men and women when they are injured. And we have had so few casualties because we've been able to care for people immediately with 'forward positioned,' highly capable people and technology, or if necessary, evacuate with great speed out of battle areas and start medical treatment immediately."

Along with the challenges surrounding the war, Dr. Winkenwerder and his office



Outside the official entrance of the Pentagon.

Photos by Lynn Woolen



Dr. Winkenwerder, right, with his boss — Defense Secretary Donald Rumsfeld, earlier this year.

have to deal with the threat of bioterrorism and domestic preparedness. "We have responsibility for the anthrax vaccine. We will be making decisions in the near future about who will get the vaccine and how to protect our people against the threat of anthrax. Our effort has been carefully coordinated with the Office of Homeland Security and with the Department of Health and Human Services. We also are working on efforts to prevent and prepare against a smallpox attack and other biological weapons."

Even though Dr. Winkenwerder was not yet in the Pentagon when it was attacked along with New York and Pennsylvania on Sept. 11, he said his job has been affected tremendously by the terrorist attacks. He was nominated by President George W. Bush to be assistant secretary of defense for health affairs on Sept. 21, 2001, and was confirmed by the U.S. Senate on Oct. 16.

"I accepted this position in the summer of 2001 not having any idea what would happen," he said. "The attacks have made the issue of dealing with terrorism my top priority. It has been a major undertaking to ensure the safety and security of people in the

armed forces from the threat of bioterrorism. We've also been drawn deeply into issues of homeland security."

As for the Pentagon itself, Dr. Winkenwerder said the renovation process has gone well. "We have every expectation that the building will be completely reconstructed within one year of Sept. 11."

Before stepping into his current position at the Department of Defense, Dr. Winkenwerder's career focused on improving the quality and reducing the cost of health care for civilians. After receiving his MBA in 1986, he worked at the Department of Health and Human Services for two years as special assistant to the administrator of the Health Care Financing Administration. There, he helped develop a proposal that led to the creation of a new agency, now known as the Agency for Healthcare Research and Quality (AHRQ), which serves as the government's focus for ensuring quality health care.

Then after working for Kaiser Permanente as a practicing internist, director of quality assurance and later as associate medical director, Dr. Winkenwerder became chief medical officer for Prudential HealthCare

Southeast Region in Atlanta. In addition to seeing patients, he also became heavily involved with managed care.

"I enjoyed working there because it got me involved in improving the practice of medicine and the system of care for doctors and patients," he said. "I got to look at issues of quality and cost."

He also held management positions at Emory University and Blue Cross Blue Shield of Massachusetts.

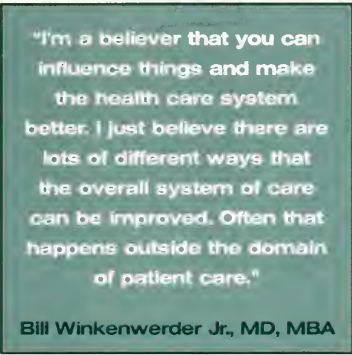
Whether working for the government or in private practice, Dr. Winkenwerder has always worked to make a difference in health care. "I'm a believer that you can influence things and make the health care system better. I just believe there are lots of different ways that the overall system of care can be improved. Often that happens outside the domain of patient care."

Dr. Winkenwerder got his first taste of the business side of medicine in the mid-1980s while completing a Henry J. Kaiser Family Foundation Fellowship at the University of Pennsylvania's medical school. He said the fellowship taught him a lot about the cost effectiveness of health care.

"The real forte of the department of medicine in the division of general medicine at the University of Pennsylvania was in the area of clinical economics. I learned how to do research that involved populations of people, not laboratory or bench research. I learned how to determine better treatments based on cost effectiveness and evidence-based medicine."

Also while completing his fellowship, Dr. Winkenwerder attended the Wharton Business School. He said it was Dr. John Eisenberg, then chief of the division of general medicine, who influenced his decision to go to business school. Dr. Eisenberg was one of the first physicians to receive a degree in business and later became a national leader on health quality and improving medical practice.

"I wasn't quite sure what I was going to do with business school training, but I knew at that time there were large societal concerns about the cost of health care and how health care should be organized, delivered and paid for," he said. "I wanted to be involved in those decisions. Going to business school turned out to be just what I was looking for. It exposed me to the business world in general and to the business side of health care and opened up a new set of doors."



But well before business school, Dr. Winkenwerder first fell in love with medicine. While an undergraduate at Davidson College, he worked several summers as an orderly at St. Joseph's Hospital in Asheville and in the morgue at Charlotte Medical Hospital, now Carolinas Medical Center. He said those experiences influenced his decision to major in biology while at Davidson College. "Those early exposures gave me a clear sense that I wanted to work in medicine," he said.

After graduating from Davidson, Dr. Winkenwerder pursued his medical degree at UNC, specializing in internal medicine. "I chose internal medicine because it was very people-centered and intellectually challenging," he said. "I always thought of myself as a generalist."

His memories of UNC are fond ones, thanks to classmates and faculty members such as James Bryan, MD, Andrew Greganti, MD, Stuart Bonderant, MD, dean emeritus, and the late Eugene Mayer, MD, Dr. Winkenwerder said. "I have the highest respect and admiration for the people at UNC. The medical center is an absolutely outstanding institution."

And the positive experiences at UNC led him to give back to the school financially and through his time. "I think it's important to give back because who you are is the product of many people and experiences," he said. "For me, giving back is a really important part of life." 🏡



An integrated perspective

New chair of Cell and
Molecular Physiology
strives to apply
physiology to human
health questions

By Rebekah Butler

James Anderson, PhD, MD, could be a spokesman for the National Science Foundation. It was during a summer program sponsored by the government agency that he became interested in the life sciences, ultimately leading him to his new position as chair of the Department of Cell and Molecular Physiology.

Dr. Anderson was born in Champaign, Ill., and raised near Saratoga, N.Y., where his father, a physicist, worked as an inventor for General Electric. Consequently, many of his early school science projects involved physics or engineering. Influenced by a summer



Born: July 17, 1952

Education: Yale College, BS; Harvard University, PhD, MD

Family: Wife, Christina M. Van Itallie, PhD; daughter, Emily, 19

Personal interests: Reading, swimming, hiking and fishing

job with the first investigator to seed clouds, he first set his sights on becoming a meteorologist. But it was when he attended a National Science Foundation summer program at age 13 that he became captivated by the biological sciences.

"The NSF program introduced me to working biologists. They were so excited about their studies, and it didn't look like work," Dr. Anderson said. "What really intrigued me early on is how complicated living things are and how understanding even small events requires an integrated perspective," he added.

Certain he wanted to focus on research in the biological sciences and to teach, Dr. Anderson attended Yale College for his undergraduate degree. He chose Yale because of its excellent reputation in both the sciences and humanities. "Although I was a biology major, I tried to take a wide-range of courses," he said.

After graduating from Yale, Dr. Anderson continued his education at Harvard University, receiving first his doctorate in biology and then his medical degree. It was at Harvard that Dr. Anderson decided to pursue his medical degree in addition to his doctorate.

"I was impressed by the number of MD faculty in the biology department. They had such an interesting perspective and pursued their basic studies with a motivation to understand and cure human disease," Dr. Anderson said.

He returned to his alma mater, upon graduating from the Harvard Medical School, for his internship and

residency. He chose internal medicine as his specialty, because of its focus on physiology and integrated function. He remained at Yale's School of Medicine until coming to UNC July 1.

After completing a postdoctoral fellowship in hepatology, Dr. Anderson joined the faculty as assistant professor of medicine with a joint appointment in the Department of Cell Biology. He became professor of medicine and cell biology in 1996, and for the last six years served as chief of the section of digestive diseases in the Department of Medicine, overseeing its clinical, teaching and research missions. During his tenure, the section of digestive diseases was the highest National Institutes of Health funded gastrointestinal section in the country.

In his various positions, Dr. Anderson taught graduate and medical students, cared for patients and conducted research. Though he held a dual clinical and research appointment at Yale, Dr. Anderson devotes all of his time to research and administration in his new position as chair of the Department of Cell and Molecular Physiology.

Being a physician and having practiced medicine up until coming to UNC, Dr. Anderson brings a medical perspective to the traditionally basic science department. Dr. Anderson does not see his new position as a radical career change.

"Medicine and physiology are intimately related. I believe that physicians are basically physiologists and

the faculty in our department speak the same language as the clinicians. What I bring to the department is the perspective of applying physiology to questions of human health," he said.

Dr. Anderson has many goals for the department, such as maintaining the traditional research strength of the faculty and to add new faculty who use genetics-based approaches.

"In the post-genome era the goal should be to understand how the genetic blueprint is expressed to orchestrate integrated body functions. The most common diseases result not from a single defective gene but a complicated interplay of numerous genes. The tools and insights available today in genetics are driving research in a more integrated and physiologic direction. It's a very exciting time to be a physiologist," he said.

Additionally, Dr. Anderson wants to continue the department's excellence in teaching for both medical and graduate students. "Physiology is one of the cornerstones of medical education. Medical students requires a firm grasp of physiologic processes and conversely, graduate students benefit from an understanding of the medical implications of their research."

Beyond his leadership, Dr. Anderson brings with him his research interests. His research focuses on understanding how organs, like the gut, maintain a barrier to fluids and bacteria; specifically, how a structure, called the tight junction, controls the intercellular pathway between epithelial cells. His long-term goal is to manipulate barrier properties for therapeutic purposes.

"Although barriers are a very basic property of multicellular animals, until recently it was difficult to point to a disease caused by tight junctions. Now there are several

human diseases caused by mutations of genes encoding tight junction proteins and our appreciation of its role is expanding rapidly," he said.

"Dr. Anderson definitely broadens the base of research expertise in the department and the School of Medicine. At the same time, his experience and familiarity with clinical problems give him perspectives of great value in developing liaisons with clinicians and in medical teaching. Equally importantly, he is proving to be a wise and

thoughtful academic leader," said Edward Perl, MD, professor in the Department of Cell and Molecular Physiology.

Dr. Anderson has received several grants from the National Institutes of Health for his research and early in his career was supported by an award from the Lucille P. Markey Charitable Trust. He is a recognized expert in the field of molecu-

lar studies of intercellular barriers and has co-authored the definitive text called Tight Junctions. Dr. Anderson also serves on several editorial boards, NIH and foundation review committees, and has organized several meetings sponsored by the Federation of American Societies for Experimental Biology.

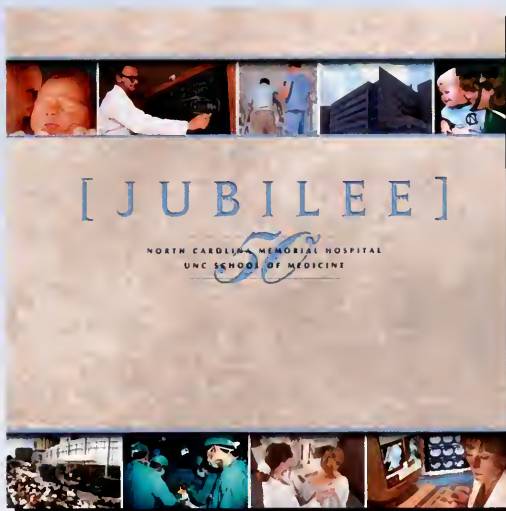
The move to UNC has given Dr. Anderson the opportunity not only to serve as the chair of a department, but also to live in the South. Though born in the Midwest, he spent most of his life in the Northeast. He says that beyond the summer temperatures, he enjoys Chapel Hill.

Dr. Anderson relishes his new position, as well.

"It is a privilege to serve as chair of this department," he said. "Every day I am impressed by the quality and international reputation of my colleagues and their commitment to teaching. I am excited about the role I have in making the department even more outstanding." 

Medicine and physiology are intimately related. I believe that physicians are basically physiologists and the faculty in our department speak the same language as the clinicians. What I bring to the department is the perspective of applying physiology to questions of human health.

JAMES ANDERSON, PHD, MD



OUR HISTORY

a spectacular retrospective in photos

A new book to be published late this summer will take a fond look back at the rich, 50-year history of the UNC School of Medicine's medical degree program and N.C. Memorial Hospital. This commemorative book will be packed with rarely seen and never-before-published photographs. The cost of each book is \$18, plus shipping and handling. Proceeds will benefit programs at UNC Hospitals.

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Sharing experiences



Robert Strauss, MD, assistant professor in the Department of Obstetrics and Gynecology, and Mary Jannelli, MD, an OB/GYN fellow — share their experience of losing a child in the video. Dr. Strauss and Dr. Jannelli discuss the different perspective they gained being the parent of the patient rather than the physician.

A new video offers insight on what families endure and how they can be assisted when a child dies

By Rebekah Butler

Death is, unquestionably, a painful subject for most people. Two women faced the subject, though, and made a video in an effort to help physicians, health care providers and others learn what to do when families are going through the most painful of all losses — the death of a child.

Erica Rothman and Beth Seyda met one another while serving on the UNC Hospitals Ethics Committee. Ms. Rothman, a licensed clinical social worker, had an interest in the impact death has on families and had made a video called *Those Who Stay Behind: When a Family Member is Dying*. Meanwhile, Ms. Seyda, a market researcher, had experienced the death of her infant son, Dylan.

Ms. Rothman and Ms. Seyda joined to make a video focusing on what families experience when there is a critically or terminally ill child. Having funded Ms. Rothman's previous video, UNC Hospitals partially funded the new 56-minute documentary, *When a Child is Dying*. Its format, like that of Ms. Rothman's first video, has families sharing what they encountered and felt when a loved one was dying.

"One of the best ways for us to learn how to support families with a dying child is through those who are willing to share the experiences they had when their child was dying," said Ms. Seyda, whose son had a congenital diaphragmatic hernia and died two weeks after he was born.

After her son died, Ms. Seyda shared with the medical team what she and her husband encountered when Dylan was dying. After his passing, Ms. Seyda wrote a 20-page summary of her experiences,

offering suggestions for improvement as well as praise.

Ms. Seyda wrote: "We were told some hospitals would not have done what UNC did to save his life. I didn't and still don't understand that. Who was putting a value on Dylan's life — was he worth trying to save? Yes, Dylan did not appear to be a good candidate to survive, but who knew for sure? Did putting Dylan on ECMO give us false hope? No, it gave us hope."

"We learn a lot from our patients sharing their experiences with us," said Bob Strauss, MD, assistant professor in the Department of Obstetrics and Gynecology and Ms. Seyda's physician.

Dr. Strauss learned from Ms. Seyda's experiences and now is trying to help physicians and others learn from his own experiences of losing a child. His daughter, Gabriella, a twin, died at 2 1/2 months of Respiratory Syncytial Virus, less than six months after Ms. Seyda's son died.

Ms. Rothman and Ms. Seyda asked Dr. Strauss and his wife, Mary Jannelli, MD, a fellow in the Department of Obstetrics and Gynecology, to be one of the four families in the video, which premiered last fall. In the documentary, Dr. Strauss and Dr. Jannelli share how they saw a different perspective as the family of a patient — not as physicians. Like Ms. Seyda, Dr. Strauss said that having hope was important when his daughter was dying. "Now as a physician, I really try to give patients hope," he said. "I've had many patients come back to me



Debra Harper-Crespo's son died of cancer at age 10.

and tell me that they appreciated me giving them hope."

The other three families in the video speak about what was important when their child was dying. All from different cultural, racial and economic backgrounds, the families also share the stresses put on siblings, marriages and finances.

Both Ms. Rothman and Ms. Seyda agree that the video has many messages. "I think one of the messages is that with the death of a child, your whole life changes. It doesn't just pinch you. It affects every cell of your body. It's overwhelming," Ms. Seyda said.

They are now completing a book that will accompany the video. *The Supportive Care Handbook* will summarize the issues confronting families with dying children and provide practical suggestions and resources.

When a Child is Dying has been selected by the End of Life Physician Education Resource Center (EPERC) as an educational tool for training physicians in end-of-life care. The video also recently won a bronze award at the Houston International Film Festival in the Family Matters category. The festival attracted 3,900 entries from 34 countries.

To learn more about the video and educational workshops or to become a benefactor, call (919) 960-3838 or send e-mail to whenachildisdying@mindspring.com. 



Erica Rothman, one of the film's creators, discusses the documentary after its premiere last fall.



what's wrong with this picture?

Medical students use artwork to hone their diagnosis skills

By Rebekah Butler

Imagine looking at a piece of art and diagnosing the possible medical conditions of the painted or sculpted subject. While the concept is different, a dozen students enhanced their physical diagnosis skills this past year through the study of art.

This unique way to teach physical diagnosis was incorporated into the Introduction to Clinical Medicine course taken by second-year students. In addition to traditional lectures and hospital rounds, the course's design allows students to choose some of their own clinical experiences, which are called selectives.

It was by a letter sent to Jeffrey L. Houpt, MD, dean of the School of Medicine, that the school was introduced to the idea of teaching physical diag-

nosis through art. The letter, sent by Edward Weissman, MD, not only explained the concept but also expressed Dr. Weissman's interest in leading the instruction.

Dr. Weissman was inspired to teach such a course after reading an article in *The New York Times* about how aspects of physical diagnosis were being taught through art at the Yale University School of Medicine, Weill Medical College of Cornell University and the University of Texas Medical Branch in Galveston. For Dr. Weissman, a retired internal medicine and geriatrics physician, teaching a course that combined medicine and art would unite his two great loves.

An artist himself, retirement gave Dr. Weissman more time to explore different aspects of

Using a novel approach, Edward Weissman, MD, helps second-year students sharpen their physical diagnosis skills through the examination of art. Dr. Weissman uses Herakles' facial expression and positional attitude as an illustration of mood disturbance.

art. Two years ago, he, along with his wife, became docents for the N.C. Museum of Art. And so when Dr. Weissman read *The New York Times* article, he already had a connection to an art museum. He just needed a medical school to accept his idea.

Dr. Weissman sent letters to all four medical schools in North Carolina, but only heard back from UNC. "I was honored that UNC, a high-caliber medical school, saw the value in what I was proposing to do."

The decision to incorporate the physical diagnosis and art selective was easy for the School of Medicine. The evolution of health care has meant medical schools must find new ways to teach students.

"Today, patients are not only sicker but also have shorter hospital stays. During the time patients are in the hospital, they are bombarded with tests in an effort to make their hospitalization cost efficient. By the time third-year students get to their patients, the patients are too tired to speak with them or are having tests, leaving virtually no time for second-year students," explained Marco Alemán, MD, assistant professor of medicine and co-director of the Introduction to Clinical Medicine course. "Because of the lack of traditional avenues, we have to think about how to teach skills in different realms and we saw this as a great opportunity," he added.

The selective, called Art for Medicine, was offered to students for the first time last fall. The structure of it is similar to other selectives, requiring students to attend one session in both the fall and spring. For the two-hour sessions, students travel to the N.C. Museum of Art, which agreed to host them.

Eleven students enrolled in Art for Medicine. As is done with all selectives, the students were divided into smaller groups to ensure personalized instruction. Dr. Weissman chose 19 pieces of art and sculpture to examine with the students. The pieces were from various periods, from the Classical to the Italian Renaissance to the American, and by both unknown and known artists, such as Reni and Copley.

The structure of the selective enhances students' physical diagnosis skills and at the same time teaches them about art. Dr. Weissman discusses each piece of art before asking the students to examine and diagnose the subject or subjects within it. The students then spend four to five minutes examining the painting for physical abnormalities, sharing their findings with Dr. Weissman and one another.

"Much of the time the students are correct with their diagnoses. While the physical abnormalities in the pieces could be anything, it is what the students learn from the exercise that is most important — to be astute observers," Dr. Weissman said.

Dr. Weissman spent hours researching the pieces in order to give the students the most accurate diagnoses. His diagnoses ranged from bell's palsy to mood disturbance. "In addition to medicine," Dr. Weissman explained, "I teach the students not only the origin of the work of art, but also some of the stylistic features the artist used."

"What surprised me the most was seeing how comparable scanning images for details is to examining people for physical attributes of illness particularly through assessment of symmetry and proportion," said Katherine Brown, a student in the selective.

While Dr. Alemán and Dr. Weissman think teaching physical diagnosis through art is a novel approach, they do not expect students to fully learn physical diagnosis via the method. Both believe that the approach should be used only to enhance the traditional methods used to teach the subject.

Dr. Weissman's interest in enhancing medical student's understanding of physical diagnosis came from his teaching it for 25 years at the Albert Einstein College of Medicine of Yeshiva University in New York City. Additionally, he had a private internal medicine and geriatric practice and was an attending physician at the Montefiore Medical Center.

Somewhere in his busy schedule Dr. Weissman found room to paint and study art. Though mostly self-taught, Dr. Weissman took art classes at New York University, the Art Students League and Pratt Institute. He has painted numerous pictures over the years using oil and water color media.

Dr. Weissman and his wife moved to North Carolina 11 years ago when he accepted a position at Blue Cross Blue Shield to direct the managed care department. He worked there for five years and has since retired.

After the success of Art for Medicine this past year, Dr. Weissman was named an adjunct assistant professor of medicine and will continue to teach the selective. "Dr. Weissman has a great depth of knowledge beyond medicine. Through the selective he is teaching students about themselves and the human condition, which will ultimately make them better physicians," Dr. Alemán said. 

Breaking down barriers

Spanish course teaches medical students how they can better help Latino patients

By Bernadette Gillis

As the number of Latinos living in North Carolina continues to rise, the need to address issues unique to the Latino community is becoming more important. Many Latinos in the state are faced with the challenge of overcoming language and cultural barriers throughout their daily lives — particularly when visiting the doctor.

To help break down these health care barriers, a medical Spanish course currently is available to medical students at the UNC School of Medicine.

The course, which is divided into two intermediate levels, teaches medical students who already have had some Spanish training how to communicate with Spanish-speaking patients. Having such a skill is becoming vital for doctors, said Marco Alemán, MD, assistant professor of medicine and the course director. "By 2030 the Latino population will be largest minority in the United States," he said. "We need to serve this population."

Two years ago two medical school students, Heather Crouse and Rebecca Sands, recognized this need and pushed to get a medical Spanish course started at the



George Sabón (left) and Rodrigo Valladolid, who often volunteer to act as patients, talk with Elizabeth Tolman before class begins.

School of Medicine. "As physicians it's our responsibility to relate to all patients," said Ms. Crouse. "We thought that creating this class would be a beginning for students to understand Latino language and culture."

Even though other Spanish language courses are available through the university, this course focuses on grammar and medical terminology the students will use as medical professionals. "Basic Spanish courses are not geared toward medicine," said Tatiana Gómez, who teaches the first level course. "In this course, students learn how to use the language to treat patients."

The course also focuses on Latino culture, which Elizabeth Tolman, who teaches the second level course, said is an important component. "We teach the culture part of the course in categories, such as respect between the provider and the patient and the importance of building trust," Ms. Tolman said. "Learning the culture will help the students communicate with patients on a person-to-person level."

"It's hard to homogenize the various cultures in the Latino population, but we emphasize basic issues such as the importance of family," Dr. Alemán added. "For example the instructors teach the students that when making decisions about health issues, some Latino patients may be reluctant to follow their physicians' advice. We tell students that it's not that the patients don't want to proceed, but that they may want to include their family members in the decision-making process."



Medical student Diane Wheeler practices her medical Spanish skills during class. The course offers students a chance to learn about Latino culture, as well.

Photos by Bernadette Gillis

Another component of the course includes role-playing sessions, where students get to perform histories and diagnose illnesses on standardized patients. "Twice during the semester the students get to practice everything they've learned up to that point," Ms. Gómez said.

"We try to come up with situations the student may encounter, such as a patient who is about to have a child," Dr. Alemán said. "They are very powerful sessions because they allow the students to practice in a safe environment."

The ultimate purpose of the medical Spanish course is to improve the health care provided to Latinos, Dr. Alemán said. "We hope our students will become advocates for the Latino community wherever they might be in their career. We want to teach all our students that as they communicate with patients they have to learn to get to know their patient as a person, not as a disease."

While learning the language and culture of Latinos will help the students communicate better with their future patients, Dr. Alemán pointed out that the purpose of the medical Spanish course is not to replace interpreters. "Not all physicians could or should conduct the entire interview in a language they don't fully understand. We want our students to learn about their own limitations. We want them to know when it is appropriate to ask for help from Spanish interpreters."

Even though students do not receive academic credit for the course, the instructors and students say they have been able to see dramatic improvement in the students' Spanish speaking skills. To see how much their skills have improved, the students are given a test at the beginning of the semester and then again once the course is over. "Recently, beginners who took the Spanish class showed a 38 percent improvement in knowledge and intermediates showed a 61 percent improvement," said Ms. Sands.

Some students have been able to see the benefits of the medical Spanish course outside of the classroom. Ms. Sands, who took the class during her second year, said she has been able to use what she has learned while working at a prenatal clinic in Raleigh, where most of the patients speak Spanish. "It helps to know the language because there are never enough interpreters," she said. "Those of us who can speak Spanish are able to see twice as many patients. It makes a big difference."

Also, many School of Medicine students have been able to use their skills serving as Spanish interpreters at the Student Health Action Coalition Clinic in Carrboro through the student-run organization, SALSA. The SHAC Clinic, coordinated by students from the schools of medicine, dentistry, nursing, pharmacy, public health and social work, provides services to local indi-

Population for N.C. in 2000

Total population: 8,049,313

Hispanic or Latino (of any race) population: 378,963

Population for N.C. in 1990

Total population: 6,628,637

Hispanic or Latino (of any race) population: 76,726

Percentage difference in Hispanic or Latino population between 1990 and 2000: 393.9%

(Source: U.S. Census Bureau)

gent residents, including a free weekly medical clinic.

Dr. Alemán said he hopes the course develops into a medical Spanish program that would include a course for beginners. Currently a beginning Spanish course is offered to all health affairs students through the student organization, LaCharla, but the course does not focus on medical Spanish alone.

He said he also hopes the program will offer academic credit along with a clerkship elective and cultural experience at the Universidad Nacional de Trujillo in Peru. "If this course becomes a credit course it will become validated," Dr. Alemán said. "That is our goal."

Dr. Alemán and Luis Diaz, MD, chair of the department of dermatology, are working to establish a summer program for first and second year students and one-month electives for fourth year students. Recently Ms. Crouse and Ms. Sands traveled to Peru to do rotations as a part of a pilot program. "In addition to utilizing their Spanish skills, we hope that this will be a unique opportunity for medical students to gain first-hand knowledge about Latino culture while also learning to practice medicine with limited resources," Ms. Crouse said. 



Marco Alemán, MD, (right) said it is becoming necessary for future doctors to learn Spanish. By 2030 Latinos will be the largest minority in the country.

50th anniversary gala





a night to remember

More than 300 people turned out April 19 at the Carolina Club to toast the 50th anniversary of the School of Medicine's MD program, as well as the golden jubilee of N.C. Memorial Hospital. The black-tie dinner attracted many faces and friends, past and present, including former deans,

Norma Berryhill, UNC President Molly Broad, state Sen. Anthony Rand and 1977 alumnus Francis Collins, MD, who was the keynote speaker earlier in the day at the genome conference, a highlight of Spring Alumni Weekend. A specially choreographed dance was

performed to "It's All Up to You," the song bandleader Kay Kyser recorded with Frank Sinatra and Dinah Shore in the 1940s as part of the state's Good Health Campaign. That effort led to the creation of the hospital and the four-year medical school. (Photos by Brian Strickland)









Finding resources

The new Women's Resource Center offers patients and the public opportunities to learn more about their own health needs

By Bernadette Gillis

Faculty, staff and volunteers were able to get their first peek at the Women's Resource Center during the center's open house and dedication May 22.

Free and open to the public, the center provides women in the community with access to current health information. Located on the ground floor of the N.C. Women's Hospital, the center aims to help women gather the information they need to make informed decisions about their health and the health of their families.

"The center is a partnership between the Women's Hospital and the Department of Obstetrics and Gynecology to underscore our commitment to women's health," said Merry-K. Moos, RN, FNP, MPH, associate professor of obstetrics and gynecology and director of the Women's Resource Center.

Women from all across North Carolina — not just patients at UNC — are welcome to use the center to learn about a range of issues including heart disease, arthritis,

diabetes, depression and endometriosis. "Our center does not just focus on issues related to pregnancy or menopause. We focus on the total health of women of all ages," Moos added.

Books, videos and pamphlets on various topics are available in the Wyeth Women's Resource Library located in the center. Some materials are also available in Spanish. A health education specialist and volunteers are available to help women find the information they need.

Women also can use one of the center's computers to access health information. On each computer are links to health sites that have been approved by faculty. "Unfortunately, people can find bad information on the Web," Moos said. "We provide links to information we think is reputable."

In addition to the information provided in the library and on the computers, soon the center will offer support groups and classes for women. The support groups will cover topics such as infertility and grief. Many departments other than Obstetrics and Gynecology also will have the opportunity to offer support groups to women through the center, said Julie Sweedler, MPH, manager of the Women's Resource Center.

"Faculty and staff are very excited about the center," she added. "They all have ideas of what support groups they want to have here. This is something they have been waiting for."

The classes will be held both at the center and at locations in the community. "We will partner with other organizations to provide lectures and classes," said Sweedler. "I see this center as a kind of center without walls. We want to bring the hospital to the community."

Even though women can find resources and support on a number of issues, Sweedler pointed out that the center is not intended to replace the care and advice of physicians. "We are not providing medical advice," she said. "We are providing women with resources. We are here to work in partnership with their medical provider."

Several years ago the center first began as a vision of a public health student who thought women in the community could benefit from a resource center. "The student got funding from the hospital to do research," said Moos. "After looking at models across the country, she wrote a paper that became a catalyst of getting the center started."

Now nearly 10 years later, the center has

The center is a partnership between the Women's Hospital and the Department of Obstetrics and Gynecology to underscore our commitment to women's health.

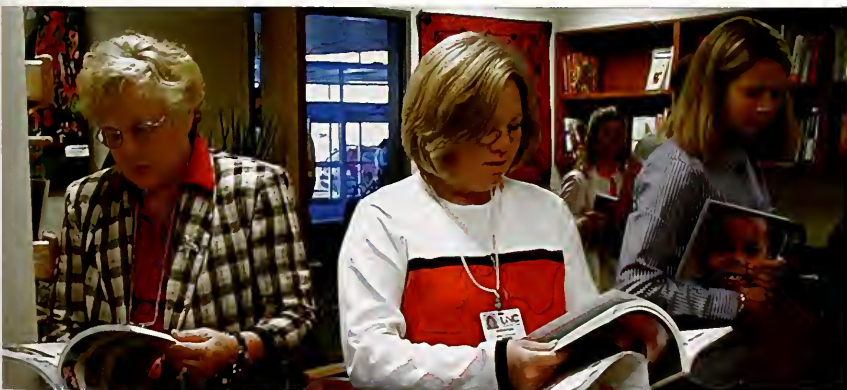
Merry-K. Moos, RN, FNP, MPH,
associate professor of obstetrics
and gynecology and director of
the Women's Resource Center

become a reality thanks to the support of local organizations and faculty, such as Valerie Parisi, MD, MPH, chair of the Department of Obstetrics and Gynecology, Moos said. A recent gift of \$130,000 from Wyeth has made possible the resources available in the library. Because of this generous gift, the collection will be able to continue to grow in directions determined by its lay and professional advisory boards.

"Dr. Parisi was instrumental in forging the partnership with Wyeth," Moos said. "In addition, the Chapel Hill Rotary Club has arranged for the purchase of computers and is donating time to help set them up to meet the needs of the center."

Moos said she hopes the center will continue to expand opportunities for health information for women throughout the area and the state. She expects the expansion will begin by developing partnerships. "Partnering with groups in the community and with women themselves will help us spread the word that we are here and that we want to serve as a source of good health information and support for them and their family members."

The Women's Resource Center is open 8 a.m. to noon and 1:30 to 5 p.m., Monday through Friday. For more information, please call (919) 843-1759. 



Employees browse through materials at the Women's Resource Center's open house on May 22. The center now provides women with information they can use when making decisions about their health.

Dr. Goldstein named chief of staff, executive associate dean for clinical affairs

Brian Goldstein, MD, has been appointed the next chief of staff for UNC Hospitals and executive associate dean for clinical affairs at the School of Medicine. Dr. Goldstein, who currently serves as associate chair for clinical operations for the Department of Medicine, said he is excited about the recent appointment.



GOLDSTEIN

"It's the best job I can imagine, the only one better than the job I already had, and I just hope that I can live up to the high standards set up by my predecessors."

As the new chief of staff, Dr. Goldstein's duties will include chairing the Medical Staff Committee, overseeing the medical staff committee structure and working to build relationships between the medical staff and the hospitals. "I will also join Dr. William Furman in working with the hospital and physicians on performance improvement activities," he added.

After attending the New York University School of Medicine and receiving an MBA with a concentration in health care management from The Wharton School at the University of Pennsylvania, Dr. Goldstein first came to UNC as a resident in internal medicine in 1989. "I knew early in my training that I was going to practice internal medicine," he said. "I liked being a generalist, and I liked caring for adults."

Dr. Goldstein held several clinical and administrative positions, including chairman of general internal medicine at the Marshfield Clinic in Wisconsin, before returning to UNC as a faculty member in May 2000. Since then he said he has worked to improve the quality of patient care at UNC. "I was also a part of a team that helped the department of medicine improve its financial footing in the clinical arena. And I've worked with the department's leadership on some operations

issues that affect the care of our patients."

Dr. Goldstein enjoys spending time with his wife, Lisa, and his children, Meryl, 11, Rebecca, 9 and Benjamin, 6. He also enjoys swimming and playing pinball.

New UNC spin-off focuses on RNA processing to develop drug therapies

UNC scientists have formed Ercole Biotech Inc., a new spin-off company based on their innovative research, to develop new RNA-directed drug therapies.

The new venture involves faculty from the School of Medicine who collaborated with colleagues in the university's Office of Technology Development and Kenan-Flagler Business School.

Ercole Biotech Inc. aims to develop novel tools and a new class of targets for the discovery of drugs for treatment of cancer, inflammatory diseases and inherited diseases, such as thalassemia, cystic fibrosis and muscular dystrophy.

University officials and Ercole executives worked hard to structure a unique licensing arrangement, said Marc Sedam, associate director of the Office of Technology Development.

"Ercole plans to develop multiple corporate partnerships to generate income and research funding," Sedam said. "The university negotiated a licensing deal to match that revenue model, rather than tying its income to specific product sales."

Ercole was formed around the research of Dr. Ryszard Kole, a professor of pharmacology. By targeting compounds that interfere with the RNA maturation process, Kole and his collaborators have corrected the expression of defective genes in cellular models of beta-thalassemia, cystic fibrosis and Duchenne muscular dystrophy. Kole's approach also was effective in cellular models of prostate cancer.

"Modification of RNA maturation offers a unique way to affect gene expression using a method that promises clinically relevant outcomes," said Kole. "Realizing that my approach may bring clinical benefits faster if the work is

carried out on an industrial scale, I decided to form a company and turned to the business school for help."

Dr. Richard E. Kouri, entrepreneur-in-residence at UNC's Kenan-Flagler Business School, is co-founder and chief executive officer of ErcoleBiotech. He also is a managing director of SyneCor, LLP, venture capital company based in Research Triangle Park. Kouri was executive vice president and chief business officer for Paradigm Genetics before joining Kenan-Flagler. He has raised more than \$200 million in private and public capital during his career.

"I am excited that we will have the opportunity to put into practice some of the premises that we have been teaching at Kenan-Flagler. In fact, three of the founders have links to the business school — Dr. Jorn Gorlach, Mr. Ted Bebenek and myself," said Kouri. "We are going to make this a success."

UNC offers faculty several opportunities to learn about licensing and the pursuit of entrepreneurial interests, including technology commercialization seminars hosted by the Office of Technology Development. Staff from that office also teach or co-teach business school courses on "Entrepreneurship in the Biotechnology Industry" and "Management of Intellectual Property."

Ercole Biotech is just the latest UNC company spawned from research conducted on campus. Last year, UNC research resulted in the formation of a dozen tax-paying, for-profit spin-off companies, officials said. That directly benefits the North Carolina economy by creating new jobs and helping improve the quality of life for state citizens.

— *UNC News Services*

Three new Kenan Professors named

Three faculty members at UNC have each been named a Kenan Distinguished Professor.

William F. Marzluff, MD, was appointed a Kenan Distinguished Professor of Biochemistry and Biophysics. The School of Medicine's executive associate dean for research and director of the program in molecular biology and biotechnology, Dr. Marzluff studies the regulation of gene activity; namely, the system of biochemical switches that turn genes on and off during the mammalian cell cycle and during early development.

His pioneering research is often at the edge of life's very beginnings, each experiment moving a step closer to unraveling the biochemical mystery of

embryogenesis, the process by which an egg transforms into an embryo. At the heart of this research is a unique cellular protein that Dr.

Marzluff's UNC laboratory discovered and cloned in 1996. This "stem-loop binding protein," may be a fundamental regulator of histone genes, which are essential for chromosome replication.

"This is an exciting time to be involved in biomedical research," says Marzluff. "And it's particularly exciting to be doing it in the company of some of the world's best."

Jack Griffith, MD, professor of microbiology and immunology and a member of the UNC



GRIFFITH

Lineberger Comprehensive Cancer Center, also was appointed a Kenan Distinguished Professor. Dr. Griffith has won numerous awards for outstanding contributions to biochemical and molecular biology research.

He has been lauded as

the world's most outstanding electron microscopist working with DNA. Dr. Griffith's melding of electron microscopy methods with biochemical tools has revealed important insights into genetic diseases. His recent discovery, with Rockefeller University colleague Titia de Lange, that the ends of chromosomes — telomeres — are tied in firmly knotted loops was heralded worldwide as important for gaining insights into cancer and aging.

The third Kenan appointee was Thomas D. Petes, MD, professor of biology and a member of the medical school's program in molecular biology and biotechnology. Dr. Petes is a member of the National Academy of Sciences and is president of the Genetics Society of America. He is also a member of the UNC Lineberger Comprehensive Cancer Center. His studies include the regulation of genome stability, regulation of mutation rates and chromosome aber-



MARZLUFF

rations. He has identified in yeast the gene TEL1, which is required for normal telomere replication. This gene is related to the human gene that is defective in people with the genetic disease of multi-systems, ataxia telangiectasia (ATM).

Created in 1917 through the bequest of Mary Lily Kenan Flagler Bingham, the Kenan Professorships were among the university's earliest endowments. Collectively, the four groups of Kenan Professorships constitute the largest number of endowed professorships available to the university. They have been credited with attracting or retaining a large number of outstanding faculty members for the university and adding substantially to the university's high academic standing.

Ex UNC resident receives honorary degree

Former School of Medicine surgical resident, Verne Edward Chaney Jr., MD, was awarded an honorary doctor of science degree during the university's spring commencement ceremony.

Dr. Chaney received the honorary degree for his lifetime commitment to improving the health care of thousands of underprivileged people throughout the world.

Since completing his surgical residency in 1956, Dr. Chaney has founded two private, non-sectarian agencies, the Thomas A. Dooley Foundation-INTERMED USA and INTERMED, in Geneva, Switzerland. The agencies, under Dr. Chaney's leadership, help develop medical care systems in less developed countries, provide medical aid to refugees and support and manage medical care for primitive tribal groups.

The School of Medicine recognized Dr. Chaney for his contributions to medicine in 1991 by awarding him with the Distinguished Service Award.

School of Medicine benefactor dies

A longtime friend and supporter of the School of Medicine, Clarence Alonzo Griffin, Jr., businessman, lawyer and war veteran, passed away this past March at the age of 84.

In 1989 Griffin and his wife formed a charitable trust that assists local activities, particularly Project Hope for at-risk children, and sponsors numerous awards and scholarships in the field of medicine. The Griffin Endowment established the

J. Rush Shull, MD Memorial Scholarship Fund in 1994 in honor of Griffin's father-in-law who died in 1971. The Memorial Scholarship Fund gives preference to fourth-year medical students who graduate from N.C. secondary schools.

Born in Rocky Mount, N.C., Griffin attended the Citadel in 1933-34. From 1934-39, Griffin attended UNC-Chapel Hill where he became an active member in several honorary groups such as the Law Review Board and held the position of president in Zeta Pi and the Interfraternity Council. Following a degree in business, he graduated in law in 1939 and began his practice in Charlotte, N.C.

In March 1941 Griffin accomplished his greatest merger, marrying Betty Shull. In April 1942, the couple was blessed with an older son, Nick. A month after his son's birth, Griffin was commissioned as an Ensign in the U.S. Naval Reserve. He served as gunnery officer-in-charge on cargo vessels in all three theaters of war, participating in the African invasion and circumnavigating the globe. Later attached to Quonset Air Station as captain of a surface target vessel, he was released to inactive duty in December 1946 as lieutenant. In 1947, the couple's second son, Haynes, was born.

Griffin later became the founding general counsel of the Charlotte-Mecklenburg Better Business Bureau, serving from 1949 to 1956. In 1956 he co-founded a merger-and-acquisition firm that later became Griffin, Glenn and Griffin. To complement the firm's operations, Griffin served as southeastern loan-origination officer for the United Merchants and Manufacturers Corporation and its successor, Crocker National Bank, until 1982.

In addition to professional achievement, Griffin was an outstanding member of the community. He and his wife co-founded Planned Parenthood for Greater Charlotte-Mecklenburg, and in 1988, the couple was honored with the Margaret Sanger Award in recognition of excellence and leadership in furthering reproductive health and reproductive rights.

Griffin is survived by his wife, Betty Shull Griffin; sons, Clarence A. Griffin III, MD '71, of Boca Grande, Fla., and Haynes G. Griffin of Greensboro; a sister, Mrs. Richard Fleming of Smithfield; and seven grandchildren.

40s

Thomas S. Perrin, CMED '42, lives in Charlotte and is retired. He was the third member of the Mecklenburg Medical Group, which now has dozens of physicians.

50s

A. Tyson Jennette, MD '59, is an orthopaedic surgeon in Wilson where he has practice for 38 years. Last year Dr. Jennette was selected Honored Orthopaedic Surgeon of North Carolina by the North Carolina Orthopaedic Association at their annual meeting.

60s

Dave M. Davis, MD '63, lives in Atlanta, Ga., where he has a weekly radio show on mental health called The Body-Mind Connection. The show airs on various stations and the Internet.

E.C. Holmes, MD '64, is chair of the Department of Surgery at the University of California at Los Angeles School of Medicine. He delivered the 29th William F. Rienhoff Jr. Lecture at the Johns Hopkins University School of Medicine in April 2002.

Wesley C. Fowler Jr., MD '66, was named by the North Carolina Obstetrical and Gynecological Society as the 2002 recipient of its Distinguished Service Award. Dr. Fowler is vice chair of the Department of Obstetrics and Gynecology and division chief of gynecologic oncology in the School of Medicine. He is also surgeon-in-chief of the N.C. Women's Hospital.

70s

Kirby Crimm, MD '70, is a cardiologist at the Wenatchee Valley Clinic in Wenatchee, Wash. Dr. Crimm is the newly elected governor for the Washington chapter of the American College of Cardiology.

Frank Moretz, MD '75, is serving as president for the North Carolina Society for Anesthesiologists. He lives in Asheville.

Margery Sved, MD '79, left Dorothea Dix Hospital in 2001. She now works part time in her private psychiatry practice and part time for Wake County Human Services. Her daughters are 8 and 16 years old.

80s

Randy Adams, MD '80, and his family have been in Taiwan for the past 15 years volunteering in a rural government hospital doing Family Practice. They are serving as missionaries with the Overseas Missionary Fellowship. The president of Taiwan recently presented Dr. Adams with an award for medical service. He and his

family return to the United States every four years and live in Charlotte for a year.

Lori Davis, MD '88, is an associate professor at the University of Alabama at Birmingham School of Medicine and director of research at the Tuscaloosa VA Medical Center. In April, Dr. Davis received a \$210,000 VA Merit Grant entitled Divalproex for the Treatment of Posttraumatic Stress Disorder.

90s

Natalie Gould, MD '94, and her husband, Lee Gordon, welcomed the birth of their daughter, Olivia Marie, April 24. Dr. Gould is finishing her fellowship at the University of Oklahoma and is moving to Denver, Colo., to join the Rocky Mountain Cancer Center.

Deaths

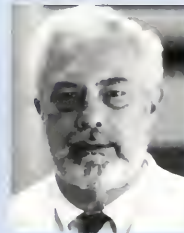
Rufus R. Little, CMED '30, died in April. He lived in Hohokus, N.J. His specialty was pulmonary disease.

Inez W. Elrod, CMED '40, died in February. She lived in Charlotte, and her specialty was pathology.

James Westmoreland, CMED '49, died in January. He lived in Pittsboro, and his specialty was internal medicine.

Carey Perry, MD '56, died May 16. He lived in Charleston, S.C. Dr. Leroy was recognized in 1988 with the Medical Alumni Association's Distinguished Service Award. He later served a term as president of the Medical Alumni Association. For over 25 years, Dr. Leroy was a faculty member specializing in Rheumatology at the Medical University of South Carolina. His career at MUSC culminated in the honor of being named Distinguished University Professor in 2000.

Bobby Rimer, MD '57, died March 6. He lived in Ennice, N.C. His specialty was obstetrics and gynecology. In the Spring of 2001 Dr. Rimer was awarded the Medical Alumni Association's Distinguished Service Award for his dedication to academic excellence.



RIMER

E. Carwile LeRoy, MD '60, died in May. He lived in Charleston, S.C., and his specialty was rheumatology.

Julia Sink, MD '84, died in January. She lived in Greensboro, and her specialty was internal medicine.

Summary

W. Reece Berryhill Society established

Planned giving arrangements are one way alumni and friends have helped ensure the excellence of UNC's medical center. Now, to honor the magnitude of such a contribution, a society has been established bearing the name of W. Reece Berryhill, MD, a former dean, who likewise gave unselfishly of himself.

The W. Reece Berryhill Society was established this past spring by The Medical Foundation of North Carolina Inc. to recognize alumni and friends who contribute through bequests, trusts and other planned giving arrangements to the School of Medicine and UNC Hospitals.

The Medical Foundation, the fundraising organization of the UNC medical center, has received gifts through planned giving arrangements almost since its creation in 1949. Though not a method used traditionally by individuals to lend financial support, planned giving is flexible and offers financial advantages.

Planned gifts can be made through a bequest or codicil, charitable gift annuity, charitable lead or remainder trust, retirement plan, individual retirement account (IRA), life insurance policy or other legal arrangement.

Most planned gifts have tax incentives. Bequests, for instance, are free from federal estate tax and the inheritance taxes of most states. A chari-

table remainder trust, however, carries a different tax incentive, allowing a person to avoid potential capital gains tax on appreciated assets.

With planned gifts, donors also can designate their money to be used for a specific purpose or for use as unrestricted funds. "Planned giving is very significant and personal. We strive at The Medical Foundation to make sure every plan meets the donor's wishes," said James Copeland, foundation president.

Individuals who make planned giving arrangements with the foundation before June 30, 2003, will be accepted as charter members of The W. Reece Berryhill Society. Alumni who have made planned giving arrangements previously with the foundation will also have charter membership in the society. Additionally, the foundation will submit all members of the society to the university for membership into its campus-wide planned gift recognition program, The Gerrard Society.

Money contributed to the foundation pays for things that state appropriations and federal grant money do not cover, such as scholarships, endowed professorships, various research funds and some facilities. All money given to the foundation is spent only according to its designation. From July 1, 2000, to June 30, 2001, over \$52 million in private support was received for UNC medicine, which is nearly

Dean Houpt hosts reception



Left, Dean Jeffrey L. Houpt with Anne Deutsch at the Guilford County Dean's Reception held March 21. Right, Dean Houpt with Sharon Foster, MD '79, Sheppard McKenzie, MD '74, and Joel Schneider, MD '85, at the Wake County Dean's Reception held Feb. 19.

10 percent of the School of Medicine's budget.

"Planned gifts allow the UNC medical center to plan for the future and they help people get satisfaction during their lifetime for what their estate will benefit in the future," said Jane McNeer, foundation vice president and coordinator of the society.

In the few months since the society's introduction, alumni, as well as others, have expressed interest in planned giving arrangements. Norma Berryhill, widow of Dr. Berryhill, has included the medical center in her estate plan, supporting the society named in honor of her husband. Mrs. Berryhill turned 100 on March 20.

Considered the father of modern medicine at UNC, Dr. Berryhill is remembered for his vision and leadership while dean of the School of Medicine from 1941 to 1964. He was influential in transforming the school from a two-year to a four-year degree conferring program, opening N.C. Memorial Hospital and creating the foundation for the North Carolina Area Health Education Centers program.

"Planned gifts are very generous contributions that ensure future excellence and leave a living legacy, which is why it was only fitting that we name the society after Dr. Berryhill whose contributions helped shape what the School of Medicine and the hospitals are today," said Jeffrey L. Houpt, MD, dean of the School of Medicine.

To learn more about planned giving or the W. Reece Berryhill Society, contact Ms. McNeer by telephone at (919) 966-1201 or (800) 962-2543 or by e-mail at Jane_McNeer@unc.edu.

N.C. Children's and Women's Hospitals gala scheduled for September

The boards of visitors for the N.C. Children's and Women's Hospitals have set Saturday, Sept. 21, as the date for the second annual benefit gala for the hospitals. The theme for this year's event will be North Carolina from the mountains to the coast, celebrating the fact that the hospitals care for women and children from all 100 N.C. counties. Food and entertainment will be in keeping with the North Carolina theme, and tickets will be \$75 a person.

This year's volunteer committee includes: Adair Armfield and Margaret Doxey Hall of Greensboro; Lee Blackman, Claire Broyhill-Greene, Roxane Gwyn, Margie Haber, Barbara Hardin, Lisa Hazen, Sara McCoy, Dina Mills and Sidna Rizzo, all of Chapel Hill; Kathy Henrichs of Durham; Annabel Harrill of Boone; Carol Huffman of Charlotte; Mary Rice of Southern Pines; and Candy Shivers of Asheville.

In its inaugural year, the gala raised over \$16,000 for programs in the Women's and Children's Hospitals, and organizers hope for even greater success this year. Volunteers are actively seeking corporate sponsorships at \$7,500, \$5,000 and \$2,500 levels to help increase the revenues for this year's event.

If you are interested in attending the event or if your company is interested in being a sponsor, contact Kay-Frances Brody, director of development for the N.C. Women's Hospital, or Gregory Holliday, director of development for the N.C. Children's Hospital at (919) 966-1201.



Michelle Curtis, a Summerlin Scholar, with Arthur Summerlin Jr., MD '46, and his wife, Agnes, at the Wake County Dean's Reception.



John Foust, MD '55, John McCain, MD '50, Betty McCain and Earle Peacock Jr., MD '47, at the Wake County Dean's Reception.

2002 Loyalty Fund



The Class of 2002 Loyalty Fund Campaign helped to raise \$31,010 in gifts and pledges from the 2002 graduating class, the second highest amount ever raised. Kevin Bruen and Rebecca Sands Stone, right, served as the co-chairs of the committee.

Private gifts helping library get facelift

Money donated by School of Medicine alumni is helping fund renovation of the Health Sciences Library, which begins this summer.

Serving as the primary resource for the School of Medicine and UNC Hospitals, the library is undergoing a \$12 million facelift. Private gifts totaling \$1 million are helping pay for the project, with other money coming from the \$3.1 billion higher education facilities bond. While private donations make up a fraction of the total cost of the renovation, the bond money is contingent upon reaching \$1 million in private support.

"The \$1 million in private gifts is allowing us to add the amenities that make the health sciences library excellent, such as expanded classroom technology, improved archival facilities for the rare book collection, and upgraded group study rooms," said Lisa Rae, director of development and communications for the library.

School of Medicine alumni contributed to the library's renovation through the Loyalty Fund, which is made up of money given by alumni to support scholarships, distinguished teaching professorships, student, faculty and alumni programs, as well as investing in the Health Sciences Library. The Loyalty Fund pledged \$200,000 to the renovation in 1998 to be paid in \$40,000 increments for five years. The last payment will be made next year. Many School of Medicine alumni made individual gifts to the library renovation as well.

"Beyond just financial support, the gift from the Loyalty Fund allowed us to leverage gifts from the other health affairs schools," Ms. Rae said.

The renovation of the library will be extensive,

involving alterations of the building's layout. When the renovation is complete everything, except the structure itself, will be new.

Currently, the library's collection exceeds its capacity. The renovation will increase volume capacity from 200,000 to over 300,000. It also will increase study space and computer seating. And the addition of state-of-the-art classrooms will directly benefit alumni who take continuing education courses through the School of Medicine.

The project is expected to take two years and is being done in two phases, allowing the library to remain open. In the first phase beginning late this summer, the basement, first and second floors are being renovated. The second phase will involve renovation of the third, fourth and fifth floors, the remaining three floors of the building.

While the space open to students and patrons will be limited to one floor during the renovation, the disruption of the library's services will be kept to a minimum. Electronic resources have been increased, allowing library users to access more information through computers. Books published before 1992 will be stored off-site during the renovation, but will remain available upon request. Current journals and texts will be available at the library.

"Service to library users will continue to be our priority during the renovation. No project of this magnitude is easy, but we definitely feel that the benefits far outweigh the inconvenience. And thanks to the contributions of School of Medicine alumni the benefits are enormous," Ms. Rae said.

Special

EVENTS



Drs. Chip Baker and James Scatliff performs a puppet show for students at Pearls Day on March 22.

Photo by Bernadette Gillis



UNC Health Care was a sponsor at the Women's Empowerment and Networking Conference March 30. Academy Award actress Angela Bassett spoke before a crowd of nearly 12,000.



Photos by Stephanie Clayton-Robinson



Mrs. Dole speaks at clinic dedication

U.S. Senate candidate Elizabeth Dole recently spoke at the dedication of the Johnston County Osteoarthritis Clinic in Smithfield for people participating in a study of osteoarthritis. The research clinic is a community outreach of the Thurston Arthritis Research Center.



Photos by Brian Strickland

JOSHUA ALEXANDER, MD, assistant professor of physical medicine and rehabilitation, has been appointed to serve on the Governor's Commission for Children's Special Needs.

NICHOLAS BANDARENKO, MD, assistant professor of pathology and laboratory medicine, was named as Young Clinical Scientist of the Year by the Association of Clinical Scientists. The association is a national organization of doctoral-level clinical laboratory scientists, which meets twice a year for educational seminars.

ROBERT BASHFORD, MD, associate professor of psychiatry, was inducted into the membership of the American College of Psychiatrists at their recent annual meeting in Hawaii.

EUGENE BOZYMSKI, MD, professor of digestive diseases, and **JAMES BRYAN, MD**, professor of general medicine, were recently elected to mastership in the American College of Physicians. Masters comprise a small group of highly distinguished physicians, selected from among fellows, who have achieved recognition in medicine by exhibiting preeminence in practice or medical research, holding positions of high honor, or making significant contributions to medical science or the art of medicine. They are recommended by the Awards Committee for election to Mastership by the Board of Regents.

GEORGE BREESE, PhD, professor of psychiatry, has been elected secretary/treasurer-elect of the American Society of Pharmacology and Experimental Therapeutics Division of Neuropharmacology. He will serve as secretary/treasurer-elect and member of the executive committee of the division for one year, beginning in July, and next year he will assume the office of secretary/treasurer.

ELIZABETH BULLITT, MD, professor of surgery, received a National Institutes of Health

Grant in the amount of \$575,977 in support of her project, "3D Image Guided Endovascular Surgery."



BULLITT

TIMOTHY S.

CAREY, MD, MPH, director of the Cecil G. Sheps Center for Health Services Research and professor of internal medicine, received the Durham-Orange County Medical Society's 2001 Community Service Award in a ceremony held recently. Dr. Carey was honored for his volunteer work in a free medical clinic for the homeless.

MARC FRITZ, MD, professor and chief of reproductive endocrinology and infertility, recently was elected chair of the practice committee for the American Society for Reproductive Medicine. He also was elected to the board of directors for the Society for Reproductive Endocrinology and Infertility.

SUSAN GAYLORD, PhD, assistant professor of physical medicine and rehabilitation and **DOUGLAS MANN, MD**, professor of neurology and medicine, have been awarded \$2,000 for their project, "Complementary Therapies for Pain Management: Integration of a Web-based, Problem-Oriented Learning Resource into the Medical Curriculum." UNC's Education Technology Group in the Office of Information Systems awarded the grant.

MICHAEL GIDDINGS, PhD, recently joined the Department of Microbiology and Immunology as an assistant professor.

PETER H. GILLIGAN, PhD, professor of microbiology and pathology and laboratory

medicine, was awarded the bioMérieux Sonnenwirth Award for Leadership in Clinical Microbiology by bioMérieux, Inc. in Orlando, Fla. As part of the award he gave a lecture, "What Patients Have Taught Me: The Clinical Microbiologist's Role in Patients' Care."

SUSAN GIRDLER, PhD, associate professor of psychiatry, has been selected to serve on the Biobehavioral and Behavioral Processes Study Section of the NIH through June 2006.

JACK D. GRIFFITH, PhD, professor of microbiology and immunology, was awarded the 2002 Herbert Sober Award for outstanding contributions to biochemistry and molecular biology by the Associated Societies of Biochemistry and Molecular Biology. He also recently received the Kenan Distinguished Professor Award.

BRUCE LESSEY, MD, professor of reproductive endocrinology and infertility, was appointed to the editorial board of the journal *Human Reproduction*. He also received renewal of an NIH U54 grant of \$839,583 for five years.

JEFFREY LIEBERMAN, MD, Thad & Alice Eure Distinguished Professor of Research and vice chair for research and scientific affairs in the Department of Psychiatry, has been elected into the Institute of Medicine of the National Academy of Science.



LIEBERMAN

JOSEPH MORRISSEY, PhD, professor of social medicine, will soon receive more than \$2.1 million in research grant funding from the NIH to expand his research program into two new areas. One area focuses on evaluating cost shifting under Medicaid managed behavioral health care, and the other focuses on service use and expenditures by families of autistic children in North Carolina. Both grants are from the National Institute of Mental Health for three-year periods. This work will be carried out at the Cecil G. Sheps Center for Health Services Research in collaboration with faculty from the Department of

Psychiatry, School of Public Health and the Frank Porter Graham Center.

HAROLD R. ROBERTS, MD, founding director and member of the UNC Center for Thrombosis and Hemostasis and Sarah Graham Kenan professor of medicine and pathology, was honored by the National Hemophilia Foundation at its second annual gala. Held in New York City's Tavern on the Green in Central Park, the gala celebrated Dr. Robert's accomplishments in the field of hematology and his on-going work to find a cure for bleeding disorders.

GEORGE F. SHELDON, MD, professor and Chairman Emeritus of surgery, has been selected to serve as president of the Uniformed Services University Surgical Associates in 2003.



SHELDON

SCOTT STROUP, MD, assistant professor of psychiatry, has been selected to receive a Young Investigator Award from NARSAD. This grant will support a study of longitudinal decision making capacity in patients enrolled in the CATIE schizophrenia study.

RICHARD V. WOLFENDEN, PhD, Alumni Distinguished Professor of Chemistry, Biochemistry and Biophysics, was elected to the National Academy of Sciences. Dr. Wolfenden is the only scientist from North Carolina among 72 new members elected to the academy this year for distinguished and continuing original research achievements. He was also appointed as fellow of the American Academy of Arts and Sciences.

WENDELL G. YARBROUGH, MD, assistant professor of otolaryngology/head and neck surgery, recently received the Harris P. Mosher Award in recognition of excellence in clinical research from the American Laryngological, Rhinological and Otological Society, Inc. He was given the award at the Combined Otolaryngological Spring Meetings in Boca Raton, Fla., where he presented his thesis, "The ARF-p16 Gene Locus in Carcinogenesis and Therapy of Head and Neck Squamous Cell Carcinoma."

AIDS database collaboration with SAS also helping patient care

A software grant from SAS Institute Inc. to the UNC Center for AIDS Research for data warehousing is also yielding valuable patient care benefits. The SAS-UNC collaboration is part of a five-year, \$600,000 grant from SAS to develop an electronic AIDS research database and data warehouse. The project, which recently became operational, is also a boon to individual university AIDS patients whose care has improved as a result of the more accessible and accurate clinical and demographic information.

"Our collaboration with SAS initially arose from a strong need to get clinical and research data about our HIV patients into an organized form," said Joseph J. Eron, MD, Center for AIDS Research (CFAR) clinical core director and associate professor of medicine. "With help and expertise from SAS, we developed an incredibly powerful tool for doing both clinical and translational research, moving clinicians and basic scientists closer together. And, while it wasn't our primary intention, the database already is improving the care of people in our clinic because clinical providers now have their information in a much more organized format."

"This project is an example of the tremendous possibilities that result from combining powerful analytic software with dedicated, innovative research professionals," said Jim Goodnight, PhD, president and CEO of SAS. "Turning data into knowledge is what SAS does best; working with UNC-CFAR to use that knowledge to improve people's lives is a cause we are honored to be a part of."

Through the on-line database, doctors at the UNC HIV clinic receive reminders on basic

health maintenance issues that help update their patients' immunizations, such as vaccinations for hepatitis A and B, pneumonia, influenza and any tests that need to be ordered. Another feature of the database is a graphic printout of patients' immune cell count and viral load. These graphs help demonstrate the impact medication is having on the patient's health.

The clinical and demographic information collected includes CD4 cell count, HIV RNA blood level and other laboratory and clinical data indicative of past and present immune system functioning, medication history and immunization history. Also included is health condition at time of initial care at UNC, demographic and social support information.

Entered into the database, the information, now organized, allows for more effective and efficient data analysis, including group comparisons for research. Having this database also improves collaboration potential with other HIV researchers both within the university and elsewhere. This is important for HIV research where large, diverse study samples are needed to help better understand the epidemic, including prevention and treatment.

Long-term survival results favor chemotherapy before surgery for locally advanced breast cancer

Long-term survival results from a breast cancer treatment study begun in 1992 at the UNC Lineberger Comprehensive Cancer Center strongly favor chemotherapy followed by surgery for women with large, locally advanced tumors.

Traditionally, women with breast cancer

Photos by Brian Strickland



Genomics conference highlights Spring Alumni Weekend

Francis Collins, MD '77 left, director of the National Human Genome Research Institute at the NIH, was the keynote speaker at "Exploring Medicine in the Post-Genome World," a symposium held during Spring Alumni Weekend. Dr. Collins was joined by Jeffrey L. Hout, MD, dean of the School of Medicine.

receive surgery followed by chemotherapy. However, the new findings also show that chemotherapy followed by surgery – neoadjuvant therapy – often allows less drastic and breast-sparing surgery, lumpectomy versus mastectomy.

Despite efforts at early detection, locally advanced breast cancer remains prevalent and is a challenge to control. In the past, many of these patients were considered inoperable because of the sheer volume of their tumors and the belief that they would soon die from spread of the disease well beyond the breast, or distant metastatic disease.

Over the last decade, studies of neoadjuvant therapy for patients with large primary tumors had demonstrated that successful tumor downstaging, or improvement, could result in increased rates of breast-conserving therapy. Moreover, a few reports indicated that tumors larger than three centimeters that were successfully downstaged with neoadjuvant chemotherapy could be controlled.

Still, the overall effect on long-term survival has remained unclear; the new findings help clarify this issue.

At a median follow up of 70 months, 76 percent of patients in the UNC study who received neoadjuvant therapy survived for at least five years. Post-treatment follow up ranged from 35 to 117 months.

In addition, neoadjuvant therapy may make surgery a viable option for women whose tumors were considered inoperable due to their seriously advanced stage, said William G. Cance, MD, professor of surgery, chief of surgical oncology and a member of the cancer center.

"I think this study now provides a surgical advantage for women with locally advanced breast cancer who undergo neoadjuvant therapy," he said.

Cance presented the follow-up results April 25 at the 122nd annual meeting of the American Surgical Association in Hot Springs, Va. Cance, along with UNC colleagues Mark Graham II, MD, and Julian Rosenman, PhD, MD, wrote the original protocol for the study, which ended in 1998. Lisa A. Carey, MD, Benjamin F. Calvo, MD, and David W. Ollila, MD, also joined the study.

Racial differences explored in treatment response for Hepatitis C

The UNC School of Medicine has been granted \$1.5 million to join seven other medical centers around the country to determine if African-Americans respond less well to anti-viral drug therapy for hepatitis C infection than Caucasians.

The VIRAHEP-C clinical trial is funded by the National Institute of Diabetes and Digestive and Kidney Diseases of the National Institutes of Health. The trial will study the effectiveness of combination therapy with long-acting pegylated interferon alpha-2a (PEGASYS) and ribavirin, an anti-viral medication. A total of 400 patients will be enrolled, equally divided between African-Americans and Caucasians.

The study was prompted in part by statistical analyses of large databases from previous anti-viral studies that suggest racial disparities exist in response to therapy for chronic infection with the hepatitis C virus.

"Major advances have occurred over the last decade

in the field of anti-viral therapy for chronic hepatitis C. Unfortunately, response to therapy has not been uniformly favorable across all populations," said Michael W. Fried, MD, associate professor of medicine and director of clinical hepatology.

Dr. Fried, a principal investigator in the trial, noted that sustained response rates in hepatitis C patients have improved to more than 50 percent with pegylated interferon and ribavirin combination therapy, compared to 10 to 15 percent for patients treated with interferon alone. Sustained virological response is defined as undetectable blood levels of hepatitis C genetic material (ribonucleic acid) after the treatment-free follow-up period.

But secondary analyses of large databases derived from clinical trials of various antiviral agents suggest that racial disparities may exist in response to therapy for hepatitis C, particularly when interferon is used as a single agent. In one such analysis, for example, sustained virological response occurred in only 2 percent of African-Americans in the trial, compared with twelve percent of Caucasian participants.

These trials, however, were not designed to study race as a factor in response to therapy. Moreover, few African-Americans have been included as study subjects, despite the high prevalence of hepatitis C in this population.

Not everyone chronically infected with hepatitis C will be studied. Only those with hepatitis C genotype 1 and having quantifiable blood levels (600 IU/ml) of its RNA will participate.

Other UNC physicians participating with Dr. Fried are Dickens Theodore, MD, Scott Smith, MD, Steven Zacks, MD, and Roshan Shrestha, MD.

UNC neuroscientist wins federal grant to study neural stem cell genetics

Larysa H. Pevny, MD, an assistant professor of genetics and a member of the UNC Neuroscience Center, has won a five-year federal grant to advance her laboratory's studies of a trio of genes involved in regulating neural stem cells. These genes (the SOXB1 subfamily) are thought crucial to neural stem cells giving rise to the central nervous system.

Dr. Pevny received her doctorate in genetics from Columbia University. She has identified one of the first known molecular mechanisms in neural stem cell regulation. Eventually, results from her work will be applied to transplantation therapy in animal models of human neurodegenerative diseases.

"Only through a thorough understanding of the cellular and molecular mechanisms will researchers be able to efficiently direct stem cell differentiation into specific cell types needed for transplantation," Dr. Pevny said.

The nearly \$1 million grant from the National Institute of Mental Health provides \$200,000 for each of four years and \$175,000 in the fifth year.

The UNC Neuroscience Center is an interdepartmental research center. Its mission is to promote neuroscience research with specific emphases on brain development, neurogenetics and neurological disease. The goal of its research working groups is to make breakthroughs in key areas that are most likely to impact the neurological and psychiatric disorder



from the president

It was a very special occasion for me to be installed as the new president of the UNC Medical Alumni Association during Spring Medical Alumni Weekend. I consider it an honor and a privilege, especially during the 50th anniversary of our four-year medical school. I am well aware of the responsibilities that accompany this position, and I welcome them.

I graduated in the undergraduate class of 1959 and the medical school class of 1962. Chapel Hill and UNC have been dear to me ever since. After a tour of active duty as a U.S. Naval flight surgeon, I did my psychiatric residency at the University of Tennessee's medical school in Memphis. I moved to Knoxville in 1970 and still live there. I practiced general psychiatry before retiring in 1993. Although I have lived in Tennessee for 38 years, I am a Tar Heel through and through.

I am sometimes asked how I became so involved with the Medical Alumni Association, The Medical Foundation of North Carolina and UNC's Department of Psychiatry. After retirement, I began to consider what kind of legacy I wanted to leave and considered the people, places, institutions and organizations that had given so much to me. I felt a keen sense of gratitude and desire to give something back. So I contacted The Medical Foundation to let them know I wanted to be more involved with my medical alma mater. Jane McNeer and Jim Copeland at the foundation were instrumental in helping me find various ways of being involved.

At our April meeting, I mentioned that as president of the Medical Alumni Association, I will push for increased involvement by our alumni and other colleagues and emphasize our need for loyalty – not just with the Loyalty Fund Campaign, which is, of course, very important, but loyalty in a broader sense. I see loyalty in this context as having four essential cornerstones: appreciation, gratitude, pride and reciprocity.

By appreciation I mean appreciation for the unique character and outstanding quality of our medical school. I have a great desire to see these things endure and for the institution to thrive in excellence and recognition.

By gratitude I mean a deep sense of feeling grateful for a medical education that was affordable and of excellent quality.

By pride I mean that I am proud of our school – what it was then, what it has become and what I believe it will be. The school has an excellent reputation nationally and internationally.

By reciprocity I mean the desire to give something back, say "thank you" in a meaningful way and invest something of ourselves in the future of our institution and those who follow us. I know it is that time for me. I hope it is that time for many of you, as well.

I will strive to engage more of our classmates and other alumni and encourage them to attend our meetings and reunions. I will urge their support and remind them that this is our 50th anniversary as a four-year medical school. I also will stress the importance of increasing support if we want to maintain the medical school's level of excellence and its ability to compete with other first-tier medical schools. In short, we need to inspire them to become more supportive of our medical school – and to do so now. We must lead by example.

I look forward to this year as president. It is an opportunity for me to learn more about our school, as well as renew acquaintances and family ties in North Carolina and spend more time in a state I love.

Ray Hayworth

Ray W. Hayworth, MD '62

We want to
hear from you . . .

The *Medical Alumni Bulletin* would like to hear from you about our publication and the stories we publish. Selected letters could appear in print in a new "From Our Readers" page. The *Bulletin* editor reserves the right to edit for clarity and space considerations only.

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Oct. 3-6 – Chapel Hill

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Nov. 1-2 – Chapel Hill

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Nov. 8-9 – Chapel Hill

Functional GI

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Medical Alumni Bulletin

School of Medicine, University of North Carolina at Chapel Hill

Children's Hospital
Plans First Radiothon **page 22**

UNIVERSITY OF NORTH CAROLINA

OCT 10 2002

What
does the
future
hold?

**\$245 MILLION
IN BUILDING
PROJECTS**

How new construction will impact medical education



Each summer, the University of North Carolina at Chapel Hill School of Medicine compiles a report for the Office of the Provost that highlights the school's accomplishments over the course of the previous academic year. Now that we are in the early part of the 2002-2003 academic year, I'd like to share with you some items that were included in the school's 2001-2002 Highlights Report.

One particularly bright spot in the 2001-2002 academic year was the Department of Medicine. The department received the top board pass rate of all academic programs in internal medicine in the United States. The department also received the highest accreditation from the American Council on Graduate Medical Education. This may help explain why 40 percent of all U.S. students who want to train in internal medicine apply for admission to UNC's program.

In addition, the department received \$54.5 million in research funding from the National Institutes of Health for fiscal year 2001, ranking 11th of 111 similar departments nationwide. Excellent departmental rankings also include: Biochemistry, \$15.7 million (5th of 105 comparable departments); Microbiology, \$11.1 million (6th of 99 comparable departments); Pharmacology, \$11.8 million (3rd of 101 comparable departments); Pathology, \$11.7 million (11th of 99 comparable departments); Otolaryngology/Head & Neck Surgery, \$2.1 million (10th of 37 departments). The School of Medicine overall was No. 14 in receipt of NIH research grants.

Several of our faculty received some of the most prestigious honors available in their respective fields. There were too many for me to mention them all here. However, we should be especially proud of Oliver Smithies, D.Phil., Excellence Professor of Pathology and Laboratory Medicine, who received the 2001 Lasker Award for Basic Medical Research, awarded by the Albert and Mary Lasker Foundation.

The School of Medicine is also continuing to develop the Department of Genetics as part of our campus-wide commitment to genetics and genome sciences research. I believe that a teaching component is critical to our obligation to train the next generation of medical researchers to fulfill the promise of this field. In that regard, the new academic department, now in its second year, has devoted much of 2001-2002 focused on establishing its teaching mission within the medical school. The faculty formulated a new course in basic genetics for first-year medical students. It is integrated into a molecular biology course taught by the Department of Biochemistry and Biophysics. This new course, "Molecular Biology and Genetics," is being taught for the first time this fall.

Finally, I would be remiss if I did not mention here that the School of Medicine this year celebrated the 50th anniversary of its four-year medical degree program. Our first class in the four-year program began their clinical education in 1952, the same year that N.C. Memorial Hospital admitted its first patients and became the School of Medicine's teaching hospital.

Since 1952 the School of Medicine has grown from a fledgling four-year program to one that is widely acknowledged as among the top medical schools in the United States. And, N.C. Memorial is now part of a four-hospital complex referred to collectively as UNC Hospitals.

Our accomplishments during the 2001-2002 academic year give me great hope about what we will accomplish in 2002-2003, and over the next 50 years.

Jeffrey L. Hout, MD
Dean, School of Medicine
Vice Chancellor for Medical Affairs
CEO, UNC Health Care System

from the dean

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on the cover



The "Magic 8 Ball" doesn't lie: Millions of dollars will be invested in new Medical School buildings and the renovation of existing structures. But how will new and improved facilities impact medical education at UNC? (Cover photo by Brian Strickland.)

Strickland.)

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Building a **dream**

Look into the future of the School of Medicine and you will see a lot of construction taking place. But what will it all mean to medical education and the successful recruitment of sought-after faculty?

**Story by Dick Broom
Photographs by Brian Strickland**

In the motion picture, *Field of Dreams*, the character played by Kevin Costner heads the mysterious voice that tells him, "If you build it, they will come." He builds a baseball diamond at the edge of his cornfield, and players magically appear and begin playing.

The same sort of thing happens in the world of medical research and education, except there is nothing magic about it. If a medical school builds first-class facilities, with ample space and the latest technology, then the most talented scientists and clinicians will come — provided, of course, the medical school is already regarded as one of the best in the country.

"Faculty members decide where to pursue their careers based primarily on the intellectual capital at an institution," says Jeffrey Houpt, MD, dean of the



Bob Marriott, assistant dean of resource analysis, planning and management, sees construction in his crystal ball.

School of Medicine. "But the resources available to them are also important, including where they are going to do their work. They've got to have the space and the latest in technology to be productive and competitive."

While the School of Medicine has maintained a remarkable record of attracting top people in a number of fields, its aging buildings and lack of space to accommodate growth have made recruitment more difficult in recent years.

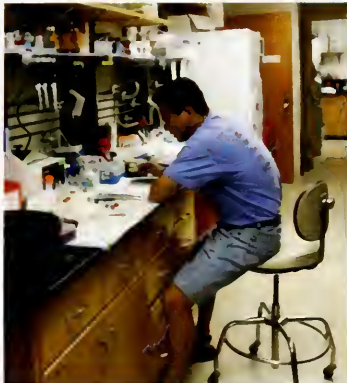
"As I assessed the situation five years ago, the state of the buildings was the biggest problem we faced," Dean Houpt said. "Any research building that is more than 20 years old is probably out of date, and some of ours were two generations off in terms of what was needed. It was critical to correct that situation in order to keep recruiting the kind of people we wanted."

The need was made more urgent by the impending retirement of a number of department chairs and center directors. In his five years at UNC, Dean Houpt has filled 22 top-level positions, more than any other dean in such a short time.

"Each of those recruitments came with a commitment of resources to help them recruit other people," he said. "Some of them wouldn't have come if we hadn't had new space coming online."

New construction

Currently, the school is in the process of delivering



Cramped lab space, left, will give way to spacious, airy quarters, right, when the Medical Biomolecular Research Building opens early next year.

on its promises of more and better space. The Neurosciences Research Building opened in July 2001. This fall brings the opening of the six-story Bioinformatics Building, which will house the Bioinformatics Center. The building has offices for about 500 faculty and staff, many of them involved in epidemiological, genetics and other types of computer-based research.

In March, the 225,000-square-foot Medical Biomolecular Research Building is set to open. It will house the Department of Physiology, part of the Department of Cell and Developmental Biology and, pending construction of another building, the Department of Genetics. Two auditorium-style lecture halls, one with 250 seats and one with 500 seats, are part of the Medical Biomolecular Research Building.

"The 30-year-old lecture halls that we have been using in Berryhill Hall were designed for much smaller classes, and they have become very crowded," said Cheryl McCartney, MD, executive associate dean for medical education. "The new lecture halls will give us both ample space and upgraded technology. Each seat will have a



larger table arm to accommodate a laptop computer, and there will be plug-in stations for electricity and Internet access. The audio-visual capabilities will also be greatly improved."

In addition to simply seating everyone who wants to attend a lecture, Dr. McCartney said the larger lecture halls will afford students more comfort and privacy when taking exams. And they will permit greater flexibility in teaching.

"For example, an instructor may want to pose a problem and then have students discuss it in small groups and come up with a solution," she said. "That is very difficult to do in a crowded lecture hall where you don't have any extra space."

The Medical Biomolecular Research Building will be physically connected to two other research buildings, Taylor Hall and the Neurosciences Research Building.

Late next year, construction will begin on the Genetic Medicine Building, a 225,000-square-foot facility that will promote interdisciplinary research with a strong focus on genomics. When it is completed in late 2005, the building will house the departments of Genetics and Pharmacology, along with some faculty of other life sciences departments. The Genetic Medicine Building will double the amount of space on campus devoted to animal holding and research. Two entire floors of the new building will literally be crawling with mice.

Much-needed renovations

Soon after the Medical Biomolecular Research Building opens next spring, both the Burnett-Womack Building and the Medical Sciences Research Building (MSRB), which attaches to MacNider and extends toward Berryhill Hall, will be gutted, and the interiors will be completely rebuilt.

"Burnett-Womack was built in 1972, and it has had no major renovations," said Bob Marriott, assistant dean of resource analysis, planning and management. "The lab designs are 30 years old, the air handling system is 30 years old and a lot of other things are at the end of their life."

When Burnett-Womack reopens in the spring of 2005, it will house administrative offices and laboratories for clinical departments, along with the medical school's patient simulation teaching and assessment labs. (See accompanying story.) One floor of Burnett-Womack will be equipped and secured for work with dangerous agents, such as bio-terrorism research.

The MSRB, now 42 years old, will be more than renovated; new construction will double its size.

"We plan to take the current front off of it and add 61,000 square feet," Marriott said.

The Dean's Office will move from MacNider to the renovated MSRB, along with the Admissions Office and Office of Student Affairs. The MSRB also will be the new home for the Department of Allied Health Sciences, and it will have several rooms designed for small-group teaching.

"We need more areas where small seminars can take place because some of the modern education techniques have students working together in small groups to solve problems," Dr. McCartney said. "The idea is to engage students more in active learning, so not all the education is taking place in large lecture halls."

Current plans call for the new, larger MSRB to open in the summer of 2005.

Berryhill Hall, built in 1965, will have its classrooms and labs completely renovated. The two-year project is scheduled to begin in January 2006.

What, when and how much?



- **Project:** **Bioinformatics Building**
- **Size:** Six floors / 150,000 square feet
- **Will House:** Bioinformatics Center, computer-based research
- **Start Date:** Under way
- **Completion:** November 2002
- **Cost:** \$35.7 million



- **Project:** **Medical Biomolecular Research Building**
- **Size:** Eight floors / 225,000 square feet
- **Will House:** Physiology, Genetics and part of Cell and Developmental Biology; 250-seat and 500-seat auditorium-style rooms
- **Start Date:** Under way
- **Completion:** March 2003
- **Cost:** \$64.8 million



- **Project:** **Burnett-Womack renovation**
- **Size:** Nine floors / 172,600 square feet
- **Will House:** Offices and labs for Medicine, Surgery and Pediatrics; patient simulation teaching and assessment labs; dangerous agents research labs
- **Start Date:** May 2003
- **Completion:** Spring / Summer 2005
- **Cost:** \$31 million



- **Project:** **Medical Sciences Research Building renovation and addition**
- **Size:** Six floors / 120,000 square feet
- **Will House:** Allied Health Sciences, Dean's Office, Admissions, Student Affairs, classrooms and seminar rooms
- **Start Date:** May 2003
- **Completion:** Summer 2005
- **Cost:** \$25 million



- **Project:** **Genetic Medicine Building**
- **Size:** Five floors / 220,000 square feet
- **Will House:** Labs and offices for Genetics, Pharmacology and other life sciences
- **Start Date:** November 2003
- **Completion:** Fall 2005 / Winter 2006
- **Cost:** \$77 million

- **Project:** **Berryhill Hall renovation**
- **Size:** Nine floors / 128,400 square feet
- **Will House:** Classrooms and labs
- **Start Date:** January 2006
- **Completion:** Winter 2008
- **Cost:** \$12.3 million

Adding it up

The total cost of the construction and renovation projects, starting with the Bioinformatics Building, will be \$245.8 million. Nearly \$115 million of that will be self-funded, the money coming from the portion of research grants that cover overhead costs. The state permits the university to retain a small percentage of this money for capital improvements.

"Our scientists are essentially earning the money to pay for the buildings," Marriott said.

Another \$80.9 million will come from the \$3 billion bond issue for higher education that the state's voters approved in 2000. The bond monies are earmarked primarily for the renovation projects. The remaining \$50 million will come from a combination of state funds, departmental funds and private-sector gifts.



The new Medical Biomolecular Research Building will boast a breathtaking atrium with staircases when it opens later this year.

Driven by Genetics

Research priorities help determine the importance of building projects

Decisions about which programs to emphasize and which avenues of research to pursue often drive decisions about which facilities to build. Fields of research that are growing fast and showing great potential are most likely to be accommodated. For example, the Genetic Medicine Building, scheduled to open in early 2006, reflects the School of Medicine's decision to make a major investment in genetics research.

The school's programmatic and building priorities may have been different without the work of Oliver Smithies, D.Phil.

Dr. Smithies, Excellence Professor of Pathology and Laboratory Medicine, is a pioneer in genetics research. Last year, he received the Albert Lasker Award for Basic Medical Research — often referred to as "America's Nobel" — for developing homologous recombination, which the awards committee called "a powerful technology for manipulating the mouse genome with exquisite precision, which allows the creation of animal models for human disease." His work paved the way for the use of gene therapy to correct genetic defects.

"No other technological breakthrough has had such a fundamental impact on mammalian genetics," said Terry Magnuson, PhD, professor and chair of the Department of Genetics.

Dr. Magnuson is one of the world's leading mouse geneticists, which is part of the reason he was so heavily recruited to lead the new department. Dr. Smithies' work with mouse genetics had already pointed the school in that direction.

"Oliver's work has had an incredibly strong influence on our strategies and our success," said Bill Marzluff, PhD, executive associate dean for research.

Two years ago the medical school's research advisory committee identified genomics as the most important program for the school to develop. At the same time, the College of Arts and Sciences, through its own strategic planning process, determined that genomics research should be a top priority. The deans of all the other health affairs schools added their endorsement.

"It is rare that a single area of study gets such universal support across a university," said Jeffrey Houpt, MD, dean of the School of Medicine. "But in this case, the faculty independently judged genomics to be the most important next step in science."

As a result, the university made resources available to create the Carolina Center for Genomics. Dr. Magnuson was recruited to lead the new enterprise, and he quickly began bringing in other top genetic scientists.

"This made it absolutely imperative that we move forward with new buildings to house the program, which was really taking off and already receiving national notice," Dean Houpt said.

Special facilities for mouse genetics research will be part of the Medical Biomolecular Research Building, which will house the Genetics Department until the Genetic Medicine Building is completed.

Genetically engineered mice must be kept in sterile conditions. If they are taken out to a lab, they cannot be brought back to the area where they are housed. So both the Biomolecular and Genetic Medicine buildings will include rooms where researchers can work with the animals inside the sterile barrier.

"While these new buildings will have a lot of standard laboratory space, we are incorporating some specific new capabilities that the mouse geneticists need," Marzluff said.

The Bioinformatics Center, which will occupy the new building that is being completed this fall, also is an essential component of the genetics research enterprise.

The only other new medical school facility currently on the drawing boards is an office building for about 300 faculty. Construction hasn't been scheduled, but tentative plans have it opening around 2008.

"If we can address the need for additional office space for clinical faculty, then I think we can move through the next decade very comfortably," Dean Houpt said. "We will have essentially all new or renovated space, which is very rare for medical schools."

Friendly and inviting

One of the attributes that has always distinguished this medical school from many others is the atmosphere of collegiality and friendly collaboration, not just within departments, but across disciplines. Will that be affected by all the physical growth?

"Putting people into a large building will bring them closer together than they are now," Dean Houpt said. "They will be getting to know each other a lot more than with the current arrangement, where they are in trailers and rented space and scattered all over creation. By building a research campus, where everything is close together, we are going to increase people's ability to work together."

"I think we are still the number one academic health center in the country in terms of collegiality," he added, "and our new buildings are going to enhance that."

They also will help solidify UNC's position as one of the leading public research universities in the country. "We clearly are in the top five, on a par with Michigan, Seattle, San Diego and Wisconsin," Dr. Marzluff said. "I think it says a lot that the state has committed the resources to make that possible and that the school has followed through on it."



Not only is the School of Medicine campus changing, but UNC Hospital's layout will improve, as well. Long-term plans call for a freestanding heart center (lower left) and new cancer center (lower right). Demolition of the old Gravelly Cancer Building will create an eye-pleasing park of greenery and water in front of the recently opened N.C. Children's and Women's Hospitals.



As the new buildings go up over the next few years, the medical school will have an opportunity to make the campus more attractive and inviting, which is something that the dean, for one, definitely wants to see. He said the university and the school must find

ways to invest in green spaces, landscaping, trees and gardens.

"We can have a much prettier, friendlier-looking place when all of this construction is completed," he said. "I believe we can create a really beautiful campus." 

Patient Simulation Labs

The renovation of the Burnett-Womack Building will allow the medical school to bring together and make more effective its patient-simulation resources for teaching students and residents. These resources include the Standardized Patient Program, the Human Patient Simulator Lab and the Virtual Reality Surgery Lab.

Mock patients

"Standardized patients" are actors who portray patients with various conditions. The medical school uses these mock patients to help students develop their interviewing, history-taking, physical exam and counseling skills. The "patients" evaluate students' interpersonal and medical skills. Training sessions are videotaped so that students can review their performance and faculty can assess their competence.

Donna Harward, associate director of the Office of Educational Development and director of the Standardized Patient Program, said mock patients have become indispensable because students no longer have guaranteed access to real hospital patients.

"If people are in the hospital for more than one day now, they are usually quite sick and can't tolerate repetitious encounters," Harward said. "By using standardized patients we can ensure that every medical student is assessed on essential skills and competencies."

Currently, the mock patient teaching/assessment sessions take place in a few small rooms in Chase Hall and after hours in the Ambulatory Care Center. The plan is to create in Burnett-Womack a Clinical Skills Teaching and Assessment Laboratory with 15 to 20 examining rooms that can be used all day, every day. This will permit the training and assessment not only of medical students, but also of residents and even physicians who come for continuing medical education.

Patient simulation

When the adult and child mannequins in a small room in MacNider are connected to a computer, they practically come to life as "human patient simulators." They can be programmed to present a multitude of acute conditions, which makes them valuable tools for teaching students and residents. The mannequins resemble the dummies used in CPR classes, but that is about the only similarity.

"The difference between a CPR dummy and the simulator is the difference between a NASCAR car and a GEO Prism," said Eugene Freid, MD, associate professor of Anesthesiology and Pediatrics and director of the Human

Patient Simulator Lab.

The simulators can mimic about 20 different patient types with nearly 100 acute conditions. Breathing tubes can be inserted into the mannequins, and medications (actually, just water) can be given through an IV port.

"When the computer is told what medication is being given, the simulators respond just as a real adult or child would," Dr. Freid said.

Every third-year medical student spends at least 10 hours in the Human Patient Simulator Lab as part of the Fundamentals of Acute Care course, learning to deal with conditions that are typically seen in emergency rooms. Residents also work with the simulators to develop their skills.

In its new home in Burnett-Womack, the lab will have room for more students to watch and participate, better videotaping capabilities and a two-way mirror for less distracting faculty monitoring.

Virtual surgery

The Virtual Reality Surgery Lab also will have better and more convenient space when it moves from the basement of MacNider. The lab has three types of simulators, plus CD-ROMS and videotapes, for training residents to perform laparoscopic surgery.

One simulator lets residents practice skills while they are looking at a monitor instead of at their hands. With another simulator, residents can see the tips of surgical instruments moving on a computer screen as they perform various procedures.

"It also provides us with objective data on the residents' performance," said Tim Farrell, MD, assistant professor of Surgery and director of the Virtual Reality Surgery Lab. "We can measure not only how fast they work, but their movement in three-dimensional space, their economy of motion."

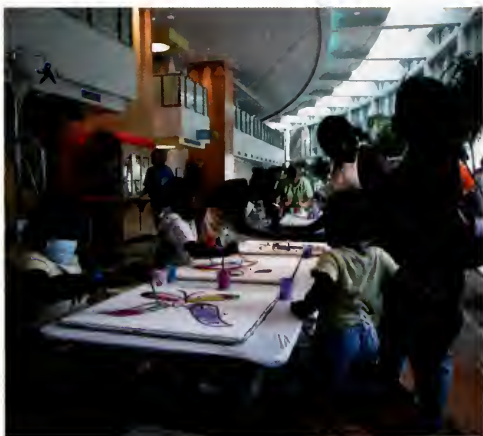
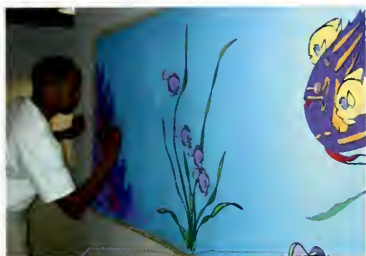
The lab helps residents improve their skills and gain confidence. "But it is far enough off the beaten path that many of them don't come down to use it on their own," Dr. Farrell said.

In Burnett-Womack, it will be more visible, more convenient and, Dr. Farrell expects, more heavily used.

Assessment and Professional Development Center

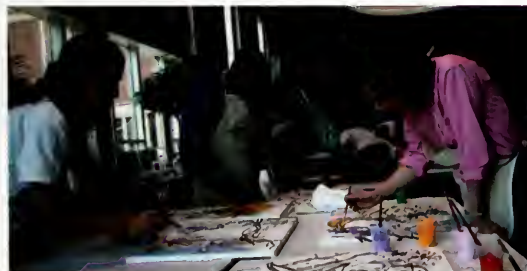
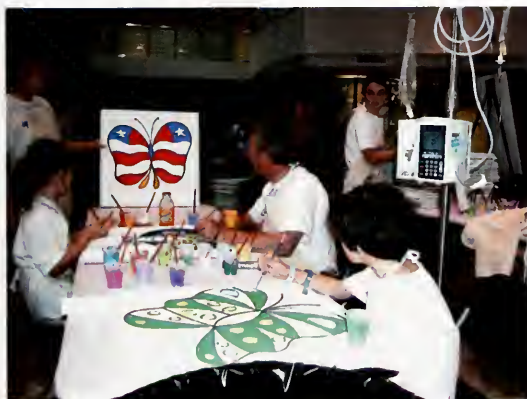
"The medical school isn't getting the most out of the (patient simulation) resources we have because they are housed in such ... unusual space," Harward said diplomatically. In Burnett-Womack, they will all be together in what she called an Assessment and Professional Development Center. 

Special EVENTS



N.C. Children's Hospital gets shot of color through painting

Patients, employees, volunteers and faculty turned out in full force for the two-day event "Operation PaintFest: Creating Brighter Children's Hospitals." In the lobby of the new N.C. Children's Hospital, participants painted colorful ceiling tiles and wall murals to be installed in the facility. The purpose of the project was to offer comfort, inspiration and hope to present and future pediatric patients, their families and staff through the creation of art. The event was made possible through a generous partnership between Pfizer Pediatric Health and The Foundation for Hospital Art.



From the heart

New chief of cardiology division
has big plans for the program's future



Dr. Ohman is pushing along plans to build a five- to six-story heart building on the UNC Hospitals Campus.

By Rebekah Butler

In more ways than one, E. Magnus Ohman, MD, has been led by the heart.

His interest in the structure and function of the heart prompted him to pursue the specialty of cardiology. But it is his heart's fondness of the United States and North Carolina that has kept the native Swede in the Tar Heel state since his arrival 15 years ago.

Though Dr. Ohman has lived in North Carolina for some 15 years, he only joined the School of Medicine's faculty a year and a half ago. He came to UNC from Duke University Medical Center to serve

as not only the chief of the division of cardiology but also the director of the UNC Heart Center.

Just as cardiology brought Dr. Ohman to UNC, it brought him to the United States, and specifically North Carolina, in 1987 when he began serving as a fellow in the division of cardiology at Duke. Dr. Ohman completed his fellowship in 1991 and joined Duke's faculty, where he remained until coming to UNC in the spring of 2001.

Dr. Ohman's interest in cardiology began when he was a medical student in Ireland, but his desire to enter medicine began in his native Sweden. Though a healthy child, a number of recurrent throat and tonsil infections gave Dr.

Ohman a personal introduction to medicine. "My tonsil infections gave me the opportunity to interact with physicians and to see the great value they bring to society."

It was as a teenager that Dr. Ohman, an only child, decided to pursue medicine. He left Sweden and moved to Ireland to attend the Royal College of Surgeons and Physicians. His decision to relocate was based on more than just his medical education.

A golfer since the age of seven, Ireland's weather allowed Dr. Ohman to play golf year round. His move also fit in with his mother's and stepfather's plan to move to Ireland, where

Born: August 17, 1955, in Stockholm, Sweden
Wife: Elspeth O'Reilly-Hyland
Children: Edward, 13, Elsa-Maria, 12,
and Henry, 6
Personal Interests: Literature and golf

they were planning to start a toothpaste factory. The language barrier was not a deterrent for Dr. Ohman because he had learned to speak English when he spent three summers south of England while in middle school.

Though his mother and stepfather moved back to Sweden, Dr. Ohman remained in Ireland to complete his medical education. Cardiology, as it happened, was Dr. Ohman's first intern rotation, and he liked it from the very beginning. "What appealed to me with cardiology was that we had a lot of information on how to monitor and treat cardiac patients," he said.



A cardiology professor, John Horgan, MD, also was influential in helping Dr. Ohman solidify his decision to go into cardiology. "John essentially got me to think about cardiology as a really scientific profession. He showed me that it is possible to provide good patient care while at the same time doing research to improve upon patient care."

Under Dr. Horgan's direction Dr. Ohman conducted his first cardiology research, which delivered findings that later were published in the *British Medical Journal*. Initiated by the collapse of an Irish marathon runner who was originally diagnosed as having had a heart attack, Dr. Ohman and others studied 14 marathon runners and found abnormal cardiac responses after strenuous exercise to be common.

Dr. Horgan's advice and personal career path played a role in Dr. Ohman's decision to study cardiology in the United States. He had trained in the United States and recommended Dr. Ohman do the same, because in the mid-1980s there was no cardiology training program in Ireland. At the time, Irish doctors desiring additional cardiology training went to England, Canada or the United States.



Valuing Dr. Horgan's advice and having had a positive experience during a surgery externship at Johns Hopkins University, Dr. Ohman decided to come to America for additional cardiology training and then return to Ireland. He ended up staying in the United States.

"I was having a good time here both clinically and scientifically, so I said, 'Why go back?' I realized that for what I wanted to do, to have an impact on individual patient care and patient care worldwide, that this was the best place for me to be," Dr. Ohman said.

Dr. Ohman became an American citizen in 2000. And just like his plans to remain in the United States, Dr. Ohman plans on being at UNC for some time.

In just the past five years, UNC's cardiology division has gone from seeing 8,000 to 11,000 patients a year, with plans to increase to 14,000. Dr. Ohman has been working since his arrival to ensure UNC can accommodate the new patients. He has recruited seven new faculty members from both the clinical and basic sciences and will be hiring three more faculty members within the next couple years.

Dr. Ohman also has been involved in planning the transition of cardiac outpatient services, which are moving from the Ambulatory Care Center to dedicated cardiology clinic space in the new Meadowmont development off N.C. Highway 54. Dr. Ohman is excited about the move, but his eventual goal is to build a freestanding cardiology clinic across from the UNC's new Wellness Center that would be geared solely toward cardiac outpatient services.

Besides a dedicated clinical facility, Dr. Ohman is striving for a dedicated research facility. The five- to six-story

building – the heart research equivalent to the Lineberger Comprehensive Cancer Center – is slated to be built in about four years.

"In addition to having a well-established vision of what constitutes a superior division, one of Magnus's gifts is the ability to implement strategies needed to obtain his goals," said Rick Stouffer, MD, associate professor of medicine and director of the cardiac catheterization lab.

Dr. Ohman's administrative duties are just a portion of his responsibilities. He also continues to see patients and conduct research.

"I try to educate my patients on the risks of their habits, and I work with them to modify their behaviors. It's the partnership of working together with patients that I think is important," Dr. Ohman said.

Dr. Ohman also coordinates his own clinical trials at UNC, and was previously the co-director of the clinical trials program for the Duke Clinical Research Institute.

"Magnus has played a leading role in the conception, performance and reporting of several of the large clinical trials that directly influence how we practice cardiology. In addition to the individual trials, Magnus has also played a large role in the development of clinical research groups which enable these large trials to be efficiently performed," Dr. Stouffer said.

Dr. Ohman knows where his own heart is.

"I am very dedicated to good health care, and I am very passionate about my research," he said. "If I can do well for my own patients, as well as people around the world, I have fulfilled the fundamental reason I became a doctor." 

Dr. Ohman's interest in the structure and function of the heart prompted him to pursue the specialty of cardiology. But it is his heart's fondness of the United States and North Carolina that has kept the native Swede in the Tar Heel state since his arrival 15 years ago.

Balancing act

Alumnus succeeds at
getting the most from
his professional and
personal lives

*Dr. Mann is an
avid golfer and
enjoys an afternoon
on the greens with
his grandson,
Abel McLawhen.*

By Bernadette Gillis

For many dedicated people – doctors in particular – it is difficult to find time for both a professional and personal life. Few can say they have found a true sense of balance in their lives at work and at home.

Tift Mann III, MD, '69, is one of those few. He has been able to successfully combine private practice with clinical research, while remaining devoted to family and enjoying life.

Dr. Mann said maintaining such a balance is possible due to his passion for both his family and his hobbies.

"My family is number one," he said. "And I have hobbies like playing golf, and I am able to get away from my work from time to time. Therefore, I have been able to work for so many years while maintaining interest in my work. It's a stressful profession, and many physicians can burn out at a premature age if they don't have balance in their lives."

On the professional side, Dr. Mann, an interventional cardiologist, has devoted the last 25 years to seeing patients at Wake Heart Associates in Raleigh. He primarily performs interventional procedures on patients with coronary artery disease. But in addition to taking care of patients, the Raleigh native has worked to incorporate clinical research into his private practice.

"One of the things I've enjoyed the most about my career is that I've been able to work with a wonderful group of physicians and that we've been able to continue clinical research in private practice," he said.

Dr. Mann said he has strongly believed in clinical research. "It's important because it helps maintain one's interest in his practice. But most importantly it's an excellent way to remain on the forefront of new developments in your field."

But Dr. Mann was quick to add that helping patients is the most important part. "Well, I enjoy the clinical research, but I also certainly enjoy taking care of patients."

Through his research efforts Dr. Mann has been able to better care for his patients while at the same time having an impact in the world of cardiology. He was instrumental in introducing to the United States a wrist-based procedure for patients with coronary artery dis-

Hometown: Raleigh, N.C.

Practice: Wake Heart Associates

Family: Wife, Dabney; son, William, lives in Sun Valley, Idaho; daughter, Dabney, lives in Atlanta; four grandchildren

Personal interests: sailing, skiing, playing golf, fishing, spending time with grandchildren

ease. The procedure results in fewer bleeding complications in patients.

"One of the big problems we had early on in coronary stenting was severe bleeding complications when the procedure was done from the leg approach. This was because of the intensive anticoagulation that was required early on in the stenting era."

Dr. Mann's interest in the transradial approach came about after learning of research being done in Europe. "Several European researchers had published early papers regarding doing this procedure from the radial artery," he said. "And at the time there were significant technological advances in the catheterization laboratory so that many devices were becoming smaller. Thus, we could do the procedure through the small artery in the wrist, and by doing so, we were able to substantially reduce the incidence of bleeding complications during these procedures."

After performing the procedure on his own patients, Dr. Mann said he and his colleagues learned of even more advantages of the procedure. "Patients could get up and walk around very quickly after the procedure," he added. "Before patients would have to stay in bed for as long as 24 hours after the procedure and would have problems with back pain and with using bedpans. But by getting up immediately all of these problems were eliminated.

"So patients preferred having this procedure done from the arm. Over the years we've continued to do it, and now we can do virtually any contemporary interventional procedure that's necessary from the radial artery."

The procedure is commonly performed in Europe and Asia and has gradually gained acceptance



in the United States, particularly in high volume centers.

Cardiologists at Wake Heart Associates now perform about 2,500 interventional procedures a year and approximately one third are performed from the center, Dr. Mann said.

Well before his successful career in research and private practice, Dr. Mann's love for medicine began at Broughton High School in Raleigh. "My biology teacher, [redacted] Fish, was instrumental in supporting my interest in biology and medicine," he said.

His interest in medicine stayed with him as an undergraduate at N.C. State University, where he was a pre-med major. While attending N.C. State, Dr. Mann said he was further influenced by Dr. Sam Tove, a biochemist. "I worked with him for two or three summers as a research associate and really enjoyed the type of research he was doing."

In 1965, Dr. Mann completed his undergraduate studies and was ready for medical school. But shortly before attending medical school, Dr. Mann married his wife, Dabney. Choosing a school close to home was important to him. So he ended up at UNC. He said, "It was the most convenient for me and our little family."

Aside from the convenience, attending the School of Medicine proved to be a wise move for Dr. Mann. There he discovered his interest in and love for cardiology and research. "Cardiology was the section of medicine I was most interested in because it appeared to be an area where I could use both my technical and intellectual skills. I could use my surgical talents while being intellectually stimulated at the same time."

After graduating from the School of Medicine, Dr. Mann completed both his



internship and residency at N.C. Memorial Hospital, where he said he was inspired by several faculty members, including Dr. Louis Welt, who at the time was chair of the Department of Medicine. Others included Dr. Earnest Craig, chair of the division of cardiology, Dr. Herbert Harned, a pediatric cardiologist, and Drs. William Wood and William Blythe, directors of the clinical research unit.

"They were excellent clinicians, but they also did very sophisticated research on a basic as well as a clinical level," Dr. Mann said. "They were all committed to what they did."

Dr. Mann also had a special relationship with other interns. "The thing I remember the most during my internship was the great camaraderie with my fellow interns. I had a wonderful experience."

Because of his positive experiences at UNC, Dr. Mann has made efforts to give back to the medical school. He is a member of the Loyalty Fund and has given talks at symposiums. "UNC has played a huge role in my happiness and the success in my life." 



OUR HISTORY

a spectacular retrospective in photos

A new book published this fall takes a fond look back at the rich, 50-year history of the UNC School of Medicine's medical degree program and N.C. Memorial Hospital. This commemorative book is packed with rarely seen and never-before-published photographs. The cost of each book is \$18, plus shipping and handling. Proceeds will benefit programs at UNC Hospitals.

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Setting an example

Photos courtesy Health Affairs Bookstore



With nearly 12 times more sales space, the new bookstore stocks a more extensive selection of medical reference books, as well as supplies and gift items.

The Health Affairs Bookstore is a booming success — and others are taking notice

By Rebekah Butler

With 7,000 square feet of sales space, four floors and a café, the UNC Health Affairs Bookstore is seen as a model academic bookstore.

While the university long had a bookstore dedicated to health sciences, it never had a building designated exclusively for the materials and services until the Health Affairs Bookstore opened in December 1999. Prior to the Health Affairs Bookstore, the textbooks and supplies for the various health sciences had been combined and sold out of only one other location.

The Caduceus Medical Bookstore opened in 1973 and was located on the ground floor of the Brinkhous-Bullitt building. Originally, the store was stocked primarily with books for School of Medicine students, but over the years the 600-square-foot store became the bookstore for all five health affairs schools.

The bookstore, which is part of the university's larger Student Stores, significantly expanded its inven-

tory selection when it moved to its new location on North Medical Drive. Multiplying its sales space by nearly a dozen times, the Health Affairs Bookstore is able to stock more than just the textbooks required for courses. Among other additions, it now carries a more extensive selection of medical reference books.

"So many of the books that medical students need are professional titles, not textbooks. Students need pocket and reference books on their various rotations and they expect to buy them from us. Now, with the larger facility, there is a much better chance that we will have all the books they need," manager Becky Dunn said.

The larger facility also has allowed the bookstore to incorporate trade books, such as bestsellers, cookbooks and children's books. And the store now offers a larger selection of school and computer supplies and collegiate and medical apparel.

"This store finally gives the university the size health affairs bookstore it needs to adequately serve the UNC health affairs community," said Dunn.

The design of the new store was decided

through a collaborative effort of Student Stores administration, bookstore staff and customers. "We surveyed customers for over a year, asking them what they would like the new store to represent. While the architects' view was that of a new mall store with open steel stairwells and concrete floors, our customers reinforced our feelings and thoughts that the bookstore should reflect the image of the medical professional and embrace the history of the practice. The store that we have now is the result of the input of many customers and friends of the store," Dunn said.

The University of North Carolina at Asheville has modeled its new campus bookstore after the Chapel Hill facility, and officials involved in the remodeling of Duke University's medical bookstore have visited. Even the director of bookstores from the University of Minnesota has sought ideas for a building project on his campus. And medical publishing representatives, who visit bookstores across the nation, cite the store, according to Dunn, as one of the nation's best collegiate health sciences bookstores.

Because the bookstore was born out of the School of Medicine, the two always have worked closely together to ensure students have access to the supplies and equipment they need. The bookstore stocks all the medical equipment first-year medical students are required to have, from dissection kits to diagnostic kits. Just recently, the bookstore began selling personal digital assistants and all their accessories since it is now a School of Medicine requirement that third- and fourth-year students have the handheld computer device.

The bookstore also is involved in three of the School of Medicine's annual events. At Match Day, the bookstore presents students with caduceus lapel pins and gift certificates that entitle them to a discount on the supplies they will need for residencies. For the White



The old Caduceus Medical Bookstore occupied a cramped cubbyhole tucked beneath the Grapevine Cafeteria.

Coat Ceremony, the bookstore assists the School of Medicine in providing the students' first white coats. And for graduation, the bookstore handles all of the School of Medicine's regalia.

Additionally, the bookstore strives to serve medical students while they are on their clinical rotations. Call-in book orders from not only medical students but also physicians working in

areas around the state are not unusual.

"Losing an ear tip from a stethoscope or the light bulb for an ophthalmoscope can present real problems. Our bookstore staff is trained in replacement parts and repair of medical equipment, as well," Dunn said.

Dunn believes that when customers make it into the store, however, they spend a longer period of time per visit than they did at Caduceus. One reason may be that shoppers can now sip coffee from the bookstore's café while they browse the merchandise.

Since opening, the bookstore has gained incremental sales each year. Proceeds go to nonathletic student scholarships, as do all of Students Stores' earnings.

"After 10 years as manager of UNC's medical bookstore, it is particularly rewarding to have alumni return to visit what is now the new store and marvel with me about how far we have come," Dunn pointed out. "As a retailer of many years, I am driven by sales and service, but the unique part of a campus bookstore is the nonprofit status, scholarship contributions and, most of all, the elite customer base we are so lucky to have."

The Health Affairs Bookstore is open 8 a.m. to 5 p.m., Monday through Friday, and 10 a.m. to 2 p.m. on Saturdays. For directions, visit www.store.unc.edu/hab or call (919) 966-2208. 

PHILIP G. BOYSEN, MD, chair of Anesthesiology and professor of anesthesiology and medicine, has been elected to the Council of the Society of Academic Anesthesiology Chairs — Association of Anesthesia Program Directors. He also serves as co-chair of the program committee for the upcoming annual meeting to be held in conjunction with the Association of American Medical Colleges (AAMC).



BOYSEN

MARK E. BRECHER, MD, professor of pathology and laboratory medicine, has been appointed chair of the National Committee on Blood Safety and Availability, which provides advice to the secretary and the assistant secretary of Health and Human Services.

JOHN BUSE, MD, PHD, associate professor of medicine and chief of general medicine and clinical epidemiology, was named associate editor of the journal *Clinical Diabetes*, as well as chairman of the American Diabetes Association Professional Practice Committee.

REMY COEYTAUX, MD, assistant professor of Family Medicine, was awarded a five-year K23 Mentored Patient-Oriented Research Career Award from the NIH entitled "Acupuncture for the Treatment of Headache." The career development plan includes coursework, tutorials and mentored research activities to provide Dr. Coeytaux with further training in clinical trial methodology, acupuncture practice and research, headache research and academic leadership.

MYRON COHEN, MD, chief of Infectious Diseases, has been named chair of the Scientific Advisory Board of the China Center for Prevention of AIDS, a \$15 million NIH project.

GORDON H. DEFRIESE, PHD, professor of social medicine and president of the N.C. Institute of

Medicine, has become editor-in-chief and publisher of the *North Carolina Medical Journal*, which has been restructured as a "journal of health policy analysis and debate" serving the interests of all health professions and the lay public who share an interest in promoting the health and health care interests of all North Carolinians.

NANCY DEMORE, MD, assistant professor of surgery, has been awarded one of 11 Career Development Awards by the American Society of Clinical Oncology. Dr. DeMore received a three-year grant totaling \$170,100 to test her research project titled "Molecular Characterization of Human Breast Cancer Micrometastases."

LUIS A. DIAZ, MD, chair and Clayton E. Wheeler Distinguished Professor of Dermatology, was appointed to a five-year term on the National Advisory Allergy and Infectious Diseases Council of the National Institute of Health.

JOE W. GRISHAM, MD, chair of Pathology and Laboratory Medicine, was recently awarded the Gold-Headed Cane Award by the American Society for Pathology, the highest national pathology award.

GAIL HENDERSON, PHD, professor of social medicine, has been awarded a supplement from the AIDS International Training and Research Program of the NIH's Fogarty Program, for IRB Capacity Building Workshops in Beijing, Shanxi and Yunnan for 2002-03.

NANCY M.P. KING, JD, professor of social medicine, has been elected a fellow of the Hastings Center. This is in recognition for her contributions to the field of bioethics.

The Robert Wood Johnson Foundation approved a grant of \$300,000 to the University of North Carolina at Chapel Hill School of Medicine in a 48-month support of the participation of **VALERIE KING, MD, MPH**, assistant professor of family medicine, in the Foundation's Generalist Physician Faculty Scholars Program.

VINCENT J. KOPP, MD, associate professor of anesthesiology, has been appointed chair of the Norma Berryhill Distinguished Lecture Speaker Selection Committee.

DONALD L. MADISON, MD, professor of social medicine and family medicine, has been appointed as associate editor of the *North Carolina Medical Journal*.

BETH MORACCO, MD, assistant professor in maternal and child health behavior and health education at the UNC School of Public Health, has recently been appointed by Gov. Mike Easley to serve on the N.C. Domestic Violence Commission.

JONATHAN OBERLANDER, PHD, assistant professor of social medicine, has been named one of the first three faculty scholars in bioethics with the Greenwall Foundation. He will be a faculty scholar for three years.



OBERLANDER

DONALD PATHMAN, MD, MPH, associate professor and research director of family medicine and senior research fellow of the Cecil G. Sheps Center at UNC, is serving as scholar-in-residence at the Robert Graham Center for Policy Studies in Family Practice and Primary Care in Washington. Dr. Pathman will be collaborating with center investigators on studies in primary care policy in Washington and Chapel Hill.

CAM PATTERSON, MD, associate professor of medicine, has been appointed director of the newly formed Carolina Cardiovascular Biology Center, whose goal is to understand the causes and therapies for heart disease and stroke using state-of-the-art biomedical technology.

HAROLD C. PILLSBURY III, MD, chair of Otolaryngology/Head and Neck Surgery, has been elected vice president/president-elect of the American Board of Otolaryngology.

OLIVER SMITHIES, DPHIL, excellence professor

of pathology and laboratory medicine, was awarded the 2002 Oliver Max Garner Award by the Board of Governors. The award is presented to a member of the UNC system who has made the greatest contribution to the welfare of the human race during the scholastic year.

SUSAN SMYTH, MD, PHD, assistant professor of cardiology, has received a Junior Faculty Scholar Award from the American Society of Hematology to study the role of P-selection and platelet-platelet interactions in thrombus formation. Dr. Smyth also was awarded a travel scholarship in the field of genetics and atherosclerosis.

KUNIHICO SUZUKI, MD, former director of UNC's Neuroscience Center, received this year's Academy Award, the most prestigious recognition in higher education in Japan for his lifelong contributions to research in neurogenetic diseases.



SUZUKI

Curtis Media Group partners with N.C. Children's Hospital to create medical center's biggest fund-raiser ever

By Tom Hughes

The N.C. Children's Hospital will reach out to millions of people across the country on Nov. 20 in a live "radiothon" fund-raiser.

That day, crews from each of the 15 radio stations owned by Raleigh-based Curtis Media Group will air the radiothon from the Children's Hospital lobby. The radiothon, which will start at 5 a.m. EST and continue until 1 a.m. on Nov. 21, is being staged under the title, "Twenty Dollars for Twenty Hours."

Listeners will be asked to contribute \$20 each. In addition to phoning in a gift, donors will be able to make contributions through the UNC Health Care and Curtis Web sites.

The Curtis stations alone, headed by UNC-Chapel Hill alumnus Don Curtis, reach more than 1 million listeners in central North Carolina. But the radiothon's reach will extend far beyond the state's borders, thanks to the participation of Charlotte-based radio show hosts Bob Lacey and Sheri Lynch. Their "Bob & Sheri" morning program airs on 65 stations across the United States, including Curtis's Star FM 102.9/96.9 in Raleigh. On Nov. 20, "Bob & Sheri" will air from 6 to 10 a.m.

The radiothon also will feature a live performance from the Children's Hospital stage by country vocal music group Diamond Rio. The popular sextet is a four-time winner of the Country Music Association's Vocal Group of the Year award.

The idea for the radiothon grew out of a realization by UNC Health Care staff, as construction of the Children's Hospital neared completion, that "we now had a physical structure to show off, and that it was time to tell our story," said Lynn Wooten, assistant director of Public Affairs and Marketing.



CURTIS

So Public Affairs and Marketing worked with the Chapel Hill advertising agency Jennings & Co. to develop media partnerships. Jennings introduced UNC Health Care to Curtis Media, and the two organizations found in each other a good match. After agreeing to a partnership, Curtis Media developed the idea for a radiothon.

"The Curtis Group has devoted nearly its entire staff to this for Nov. 20," Wooten said. "Their corporate commitment is extremely generous, and we really appreciate the extent to which they're willing to help the Children's Hospital."

Don Curtis said his company decided to get involved because of a deep commitment to the area. "We think that our listeners want to be a part of an overall community," he said. "We're sort of a conduit creating opportunities for the public to get involved."

Curtis, who grew up in Bessemer City, N.C., began his career in 1957, when he was just 15 years old, by selling advertising time for radio station WKMT in Kings Mountain. Now he heads a media group that bears his name and operates North Carolina's largest network of radio stations; separate networks for news, agricultural news and traffic information; a marketing group; and more than 30 Web sites. He also has a bachelor's degree in broadcasting from the University of North Carolina at Chapel Hill. And last April, he was inducted into the North Carolina Association of Broadcasters Hall of Fame.

When he was interviewed for this story, Curtis insisted that credit for the radiothon plan properly belongs to Phil Zachary, executive vice president of Curtis Media.

According to Zachary, Curtis Media wasn't sure at first they would throw their support into a fund-raiser for the Children's Hospital. "We get requests like that all the time," he said, and the company wanted to make sure that the Children's Hospital was a proper focus for its philanthropic efforts.

Then, 15 people from Curtis came to Chapel Hill for a tour of the Children's Hospital.

"We learned up there that this really was the children's hospital for all the children of North Carolina," Zachary said. "No one was refused, no one was turned away, and they were really doing miracle work there. We came away with a genuine sense of humility and awe as to what they were accomplishing in Chapel Hill."

The group decided during its trip back to Raleigh that they wanted to create a fund-raiser for the Children's Hospital that would be really special.

"Too many of these appeals are long-winded and laborious and fatiguing for everyone involved," Zachary said. "So we felt that if we concentrated in one short burst, and asked for an amount of money that almost anyone could contribute, and that if we



BOB AND SHERI

made it easy to remember, that we would have a real chance of being successful."

The company decided to put all of its properties and employees into the effort. "We will literally be deploying some 200 Curtis Media employees toward this one goal, to get as many people as we can possibly motivate to come up with \$20 for these children at the N.C. Children's Hospital," Zachary said.

50th anniversary publicity campaign focuses on guiding principles

By Ning Zhou

Established in 1952, N.C. Memorial Hospital began operating with the intention of bringing quality health care to the state of North Carolina. In the same year, the UNC School of Medicine became a four-year, medical degree-granting institution. To mark the medical center's golden anniversary this year, two commercials are airing to remind the public of UNC's long-standing commitments to North Carolina.

Through the creative efforts of UNC Health Care's Public Affairs and Marketing department and Chapel Hill-based advertising agency Jennings & Co., the commercials were completed in late June.

Lynn Wooten, assistant director of Public Affairs and Marketing, predicted a spark in community interest before the commercials began statewide broadcast in early August.

"The publicity campaign for the hospital's 50th anniversary will focus on the historical and social significance of UNC Health Care," Wooten said. "We want to remind people of who we are and why we are here."

According to Deway Mooring, Jennings & Company senior account executive, one of the commercials will feature practicing physicians who were trained at the School of Medicine.

"The main goal of the School of Medicine was to provide a top-notch education for future physicians who would serve the people of North Carolina," Mooring said.

"This commercial features physicians who have stayed in the state to practice medicine, accenting their lasting dedication to the health and welfare of the community."

Another commercial will

highlight the medical center's goal of treating patients throughout the state. Wooten hoped the commercials would reflect a sense of UNC Hospitals' history and tradition.

"The commercial of the patients reflects UNC Hospitals' statewide dedication to the welfare of the community. The commercial captures real-life success stories at UNC Hospitals, as well as our commitment to providing quality health care regardless of economic status."

Filming took place in locales such as the Triangle, Wilmington, Charlotte, Boone, Greensboro, Lumberton and Fayetteville in an attempt to reflect the statewide reach of UNC's medical center. The spots were scheduled to air in those television markets as well.

Both Wooten and Mooring credited the successful outcome of the commercials to an outpouring of cooperation from patients and doctors.

"We looked at a lot of different options, but kept coming back to what was at the core of the institution – a commitment to caring," Wooten said. "The commercials draw attention to how UNC has worked to fulfill the mission set out 50 years ago and how the system continues to benefit the community."

"Hopefully, these commercials will make a lasting impression and send a powerful message to the people of North Carolina," Mooring added.

The publicity campaign also features print ads that mirror the television spot featuring patients. The print ads will run in local newspapers and statewide magazines, as well as on signage at Raleigh-Durham International Airport.

Commemorative book looks back at medical center's rich, 50-year history

By Jigna Patel

To commemorate the golden anniversary of N.C. Memorial Hospital and UNC's medical degree program, a book – *Jubilee: A 50-Year Illustrated Retrospective* – will be published this fall.

"We think the book will spark a lot of memories for a lot of people," said Lynn Wooten, assistant director of Public Affairs and Marketing.

The idea for the book was sparked by the discovery of historic pictures of the hospital and school at UNC's Wilson Library during the production of a 50th anniversary-related film. The large collection of photos dates to the 1950s and '60s. "The pic-



tures needed to be used. It would have been a waste from them to continue unseen after all these years," Wooten said. "The 50th anniversary is an important milestone for the hospital and the School of Medicine, and we wanted to do an extra special keepsake."

Dick Broom, a freelance writer, worked in the Office of Medical Center Public Affairs at N.C. Memorial from 1976 to 1986 and wrote copy for the book. "I hope *Jubilee* will help give UNC employees an even greater sense of pride by showing the traditions of excellence, collegiality and service that have been part of the hospital and medical school throughout the past 50 years," he pointed out.

Chapters focus on such topics as nursing, volunteers, medical firsts, air care, the N.C. Jaycee Burn Center and the history of psychiatry at UNC, Broom said.

Bill McLendon, MD, who has had a longtime interest in the history of the medical center, assisted in the project. "I think it will be a wonderful pictorial history of the hospital and four-year medical school," he said.

The book allows readers to look back and see why the hospital and school were established and how much each organization has grown, Dr. McLendon added.

"*Jubilee* also is a great holiday or graduation gift idea," Wooten said.

The book costs \$18, plus shipping and handling, and may be purchased using the order form in this issue of the Medical Alumni Bulletin, from the gift shop at UNC Hospitals, at UNC's Health Affairs Bookstore or at the Bull's Head Bookshop inside UNC's Student Stores. Proceeds will benefit programs at UNC Hospitals.

Dr. Easterling recognized

William Easterling, Jr., MD, retired professor of obstetrics and gynecology and former associate dean for continuing medical education from 1989-98, received the Frances M. Maitland-PACME Award from the Alliance for CME at its 27th Annual Conference. The award recognizes commendable contributions to continuing medical education. It was presented to Dr. Easterling and fellow authors of "CME: A New Vision of the Professional Development of Physicians," which was published in Academic Medicine in December 2000.



EASTERLING

Interim head of Nursing receives inaugural award

Each year the *Triangle Business Journal* honors 25 Triangle women who have displayed leadership in business. In addition, this year, one Triangle woman was honored with a special Business Lifetime Achievement Award: Sandra Evans, RN, MSN, senior vice president, who is retiring from UNC Health Care.

"The announcement came as a tremendous surprise," Evans said. "I was truly honored and overwhelmed to learn that I was the inaugural winner, as well."

Evans has been with UNC Health Care since 1973. When asked what her greatest accomplishment has been while at UNC she said, "In every case, it was a group effort, regardless of the project.

However, two initiatives or milestones for Nursing were the establishment of the state's first career ladder for registered nurses, as well as the work done with the General Assembly to achieve autonomy in classification and compensation for licensed nurses. I'm proud of what we were able to accomplish."



EVANS

Survey informed us about our readers

In the Spring issue of the *Medical Alumni Bulletin*, we asked for your opinions on the publication's content and new look. Over 120 readers replied to our survey.

Most of the Bulletin's readers responded positively to the magazine's revamped design, saying it is more organized and professional looking. Meanwhile, 21 percent expressed interest in an online version of the *Bulletin*.

Readership of alumni profiles, faculty profiles, history and nostalgia and current issues in medicine are the *Bulletin's* most popular sections, followed by columns by the dean and the Medical Alumni Association president. Cover stories received high rankings, too. Stories relating to ongoing research, medical students and departmental activities received mixed responses.

Many of our readers seek more news and information concerning UNC alumni. Over 80 percent of those who replied to the survey want the Bulletin to develop a personal essay column about the "School of Medicine years" written by different alumni. "I want to see more articles on any mentor relationships between alums and medical students," one reader wrote.

Another reader replied, "It would be interesting to see more articles about the medical program from the viewpoint of students who are currently going through the School of Medicine."

You also made some great suggestions about the content and informational value of the *Bulletin*. Many members of our audience want additional articles about specific departments or specific issues in medicine. "Women in medicine!" one reader wrote. "Where are they in your issues?"

While a few readers thought our publication should offer more, one survey responder pointed out that "the *Bulletin* is a valuable resource, but not the only source of information, nor could it be expected to be."

We appreciate everyone who took time to offer us feedback and suggestions, and please know we're always looking at ways to make the publication even better.

—Lynn Wooten
Editor

50s

Jack Blackley, CMED '51, is retired. He was the director of North Carolina's Division of Mental Health, Mental Retardation and Substance Abuse. Dr. Blackley now serves as a consultant for the division.

H. Maxwell Morrison Jr., MD '57, retired in March after 41 years practicing ophthalmology. Except for the two years he served in the Navy, Dr. Morrison's career was spent in Pinehurst.

Charlie Macy, MD '58, retired from practicing internal medicine in June after 37 years with the Lansdale Medical Group in Lansdale, Pa.

70s

Claudette Dalton, MD '74, won the University of Virginia's Sharon L. Hostler Outstanding Woman in Medicine Award. Dr. Dalton is an assistant dean for community-based medical education and an assistant professor of medical education and anesthesiology at UVA.

Larry E. Warren, MD '74, graduated from the UNC School of Law in May 2000 and was admitted to the North Carolina Bar Association.

80s

Tommy Lawrence, MD '87, and his wife, April, welcomed the birth of their third daughter, Sofia Marie, in July.

David Sheridan, MD '87, moved to Concord to join Cabarrus Radiologists after spending 10 years practicing in Columbia, S.C. He and his wife also celebrated the birth of their fourth child in June.

90s

Stan Alexander, MD '90, his wife, Linda, and Taylor, their 2-year-old son, have moved from Indianapolis, Ind., to Fort Myers, Fla., where Dr. Alexander has joined private practice at Radiology Regional.

Waldon Garriss, MD '93, is an assistant professor of internal medicine and pediatrics at Vanderbilt University. He also serves as the director of the Vanderbilt Combined Internal Medicine-Pediatrics Residency Program. Dr. Garriss received Vanderbilt University's 2002 F. Tremaine Billings Faculty Teaching Award for Excellence in Primary Care Education for his work with house staff education.

Joel Ang, MD '96, recently moved to Clayton where he is practicing at Clayton Medical Associates.

Julie Haizlip, MD '96, and her husband, Biff Beers, celebrated the birth of their second son, Max Thomas, in March. Max joins Silas, who is 3 years old. Dr. Haizlip currently is doing a pediatric critical care fellowship at Primary Children's Medical Center in Salt Lake City, Utah.

Sherene Shakibmin, MD '97, is a clinical fellow in the division of infectious diseases at UNC. In July, Dr. Shakibmin was awarded the International AIDS Society's Young Investigator Award at the XIV International AIDS Conference in Barcelona, Spain.

2000s

Stephen North '00, received the 2002 American Academy of Family Medicine's Resident Community Outreach Award for work with his neighborhood elementary schools. Currently, Dr. North is a resident in the Department of Family Medicine at the University of Rochester in New York.

Deaths

George P. Rosemond, CMED '32, died in May. Dr. Rosemond lived in Elverson, Pa., and his specialty was thoracic surgery.

John S. Howie, MD '58, died in July. Dr. Howie lived in Raleigh, and his specialty was psychiatry.

Rutherford "Rud" Brown Polhill Jr., MD '68, died in April. Dr. Polhill lived in Birmingham, Ala., and his specialty was pediatrics.

Andrew Gross, MD '88, died in May. Dr. Gross lived in Signal Mountain, Tenn., and his specialty was internal medicine.

Correction

In the last issue of the *Alumni Bulletin*, the following announcements were mistakenly garbled together. We regret the error and apologize to relatives and friends.

Carey Perry, MD '56, died in January. Dr. Perry lived in Louisville. He was a general practitioner.

E. Carwile LeRoy, MD '60, died May 16. He lived in Charleston, S.C. Dr. LeRoy was recognized in 1988 with the Medical Alumni Association's Distinguished Service Award. He later served a term as president of the Medical Alumni Association. For over 25 years, Dr. LeRoy was a faculty member specializing in rheumatology at the Medical University of South Carolina. His career at MUSC culminated in the honor of being named Distinguished University Professor in 2000.



LE ROY

Bioengineered, rhythmically beating heart muscle could aid cardiac research

The collaboration between cardiologist and orthopedist may at first seem novel, if not odd. But just such an interdisciplinary connection at UNC has yielded potentially useful fruit: a bioengineered, rhythmically beating experimental model of heart muscle.

The new model system is a bioartificial trabeculum, or BAT. Trabecula are thin sections of cardiac tissue within the inner surface of the heart's main pumping chambers. Although still some distance away from any human clinical application, the model could prove a valuable scientific tool for exploring cardiac disease, including electrical and mechanical disturbances of the heart.

Details of the heart tissue model were presented in August to the World Congress of Biomechanics in Calgary, Canada.

"The purpose of our study was to explore the possibility that one could take isolated heart cells and under proper conditions allow them to coalesce and attach to each other in a functional way, thereby creating an artificial tissue," said cardiologist and co-developer Wayne E. Cascio, MD, associate professor of medicine at UNC.

Dr. Cascio said the idea for the BAT originated with a biomedical engineering lecture by Albert J. Banes, MS, UNC professor of orthopedics. Through a company he founded 18 years ago, Flexcell International in Hillsborough, N.C., Banes had developed a special tissue plate that has proven a useful framework in which cells in a liquid collagen gel could remodel on their own to form a more tissue-like structure. Other work elsewhere has involved rigid structures or lattices upon which cells attach to and grow.

"The fundamental basis for that company was a flexible bottom culture plate with the thought that all cells in tissues in our body are subjected to some forms of mechanical load, cyclic tension being one of them," Banes said. "We thought it would be better to grow cells in a dynamic environment, on a flexi-

ble substrate. We could then stretch the tissue cells in a certain way to simulate the effects of mechanical loads on tendon, muscle bone, ligament, and cartilage and also add

the shear stress that occurs during fluid flow in blood vessels. Dr. Cascio very astutely thought we could grow cardiac myocytes and make a cardiac muscle tissue-like material to test in culture. And that's where the collaboration began."

In developing the tissue model, Cascio and his laboratory assistant Joseph Brackhan, isolated cardiac myocytes from one-day-old rats. These were mixed in a solution of collagen and serum and allowed to gel under incubation in a Flexcell Tissue Train Plate. The tissue train plates have two nylon tethers at opposite ends of each well and a flexible silicon rubber bottom. After four days in culture, the heart cells migrated toward the center of the gel to form a dense cord of tissue that extended between the two tethers.

The team's long-term goals are to apply this system to study the effects of mechanical loading on normal cardiac physiology and to develop a model system for the study of cardiac illnesses such as congestive heart failure.

Platelet molecule regulates blood coagulation, study finds

New UNC research has found that a fatty molecule on the surface of platelet cells is a regulator of blood coagulation.

Besides its role in forming cell membranes, the lipid phosphatidylserine, or PS, also appears to activate the final step in the process of blood coagulation — the conversion of prothrombin to thrombin, the



CASCIO

central enzyme of coagulation. Thrombin is needed both to encourage and then cut off clotting at a wound.

A report of the research appears in the online edition of the *Journal of Biological Chemistry*; print publication is slated for August.

Senior author is Barry R. Lentz, PhD, professor of biochemistry and biophysics.

Harold Roberts, MD, Sarah Graham Kenan professor of medicine and pathology and a renowned hematology expert, hailed the new results as "a major accomplishment in our understanding of blood coagulation which is essential to our understanding of blood clotting disorders that cause heart attacks and strokes, the major causes of mortality in the United States and the rest of the Western world."

Dr. Lentz said the new paper is the culmination of a series of reports from his laboratory countering a popular belief in the field about blood cell membranes' role in thrombin production. In that view, thrombin production occurs in a reaction occurring on the surface membranes of platelets, the blood cell responsible for clotting. Although Dr. Lentz, and then others, showed that membranes containing PS work best in thrombin formation, the popular view proposed no role for PS except that it is a negatively charged component of platelet membrane structure.

Dr. Lentz said the new findings unequivocally support a new view, that PS can activate conversion of prothrombin to thrombin in the absence of the platelet membrane surface. And it does so by triggering assembly of the enzyme complex, prothrombinase, which is crucial to that process, he added.

"Our research findings demonstrate clearly that we formed the complex in solution and that the formation and activity of the complex are regulated by phosphatidylserine," Dr. Lentz said.

The study was supported by a grant from the National Heart, Lung and Blood Institute of the National Institutes of Health.



LENTZ

New study shows that RING Finger proteins target cellular molecules for disposal

UNC scientists have discovered another facet to the molecular engine that targets cell proteins for elimination.

The discovery was made in *Drosophila*, fruit flies, which share with mammals the same group of genes that code for proteins involved in regulating this targeting process. A report of the findings appears June 7 in the journal *Developmental Cell*.

The destruction of proteins during the cycle of cell growth and division is as important as protein production. Depending on when in the cycle it occurs, a breakdown in this proteolysis process can either stop a cell from dividing and replicating its chromosomes, or it can result in cell growth run amok, becoming cancerous. Because of its implications for health and disease, exactly how proteolysis is regulated, how cells "know" which proteins to eliminate and when, is the subject of intense scientific investigation.

"Many proteins that are important regulators of progress through the cell division cycle are inactivated by being destroyed, reduced to their component parts at particular times in the cycle. And that destruction, through ubiquitin-mediated proteolysis, is necessary for cell cycle regulation," said the report's senior author Dr. Robert J. Duronio, associate professor of biology at UNC and a member of the Program in Molecular Biology and Biotechnology at the School of Medicine.

This proteolysis process involves attachment to other proteins of the small protein, ubiquitin. The attachment is a signal for proteolysis; it tells the proteolytic machine to destroy the ubiquitinated protein, to chew it up and decompose it.

"A family of enzymes in cells puts ubiquitin onto the target proteins. And among the most important members of this family are E3 ubiquitin ligases," Dr. Duronio said. "These have received a lot of attention because they're thought to be the enzymes that recognize which proteins will get ubiquitinated."

Funding for the research came from the National Institute of General Medicine at the National Institutes of Health.

Benefits of Excellence Fund extend beyond medical school

By Bernadette Gillis

Scholarships for students in need, student research awards and teaching professorships are all important in advancing medical education, research and patient care. Without the support provided by the Excellence Fund, such programs at the School of Medicine would not be possible.

The Excellence Fund, which focuses on non-alumni giving, is a division of the unrestricted annual fund of the The Medical Foundation of North Carolina Inc. Because only 14 percent of the combined budgets of the School of Medicine and UNC Hospitals comes from the state, the fund is vital in maintaining the school's programs. The fund allows corporations, foundations, patients, parents of medical school students and others to help the school fill many of its unmet needs.

The fund supports medical students by providing teaching and laboratory equipment for classrooms, grants to help students travel to residency interviews and scholarships.

"A large part of the budget goes to scholarships," said Shana Odle, senior development officer at The Medical Foundation. "The scholarships not only help UNC recruit outstanding students but also give

students in need of financial help an opportunity to attend UNC."

Student research awards also are made possible by the Excellence Fund. The research awards provide one-year, full-tuition scholarships to allow students to pursue research under the guidance of UNC researchers. The recipients of the awards are determined by a committee made up of faculty, Medical Foundation staff and others.

The fund also allows for support of promising scientific research. Seed grants awarded through the Excellence Fund help researchers begin projects that could lead to new treatments and cures. The grants are open to researchers in programs throughout the School of Medicine, and past recipients have included the Lineberger Comprehensive Cancer Center, the Center for Maternal and Infant Health and the Bowles Center for Alcohol Studies.

Another important program provided by the fund is the distinguished teaching professorship. This endowment, when fully funded, will provide a five-year stipend to an outstanding faculty member selected by students and faculty.

Outreach also is an important function of the Excellence Fund. The Dean's receptions, the White



The Excellence Fund benefits a number of programs and events, including the annual White Coat Ceremony, above, and Family Day, left.

development

Coat ceremony and the annual Family Day are all outreach programs sponsored in part by the fund. Such programs benefit faculty, students and parents, as well.

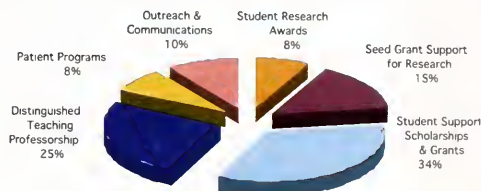
Patients also benefit from programs such as the Door-to-Door Performing Artist Series, which brings performing artists to patients and their families while in the hospital.

Ultimately, the Excellence Fund benefits many – even those not affiliated with the medical school. And thanks to recent donations the school will continue to meet the needs of all North Carolina residents.

If you are interested in learning more about

the Excellence Fund or making a donation, please contact Shana Odle at (800) 962-2543 or email shana_odle@unc.edu.

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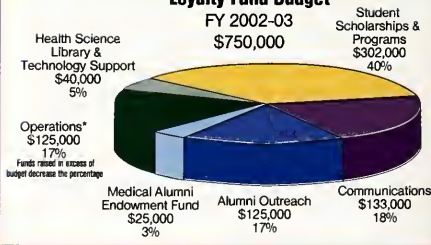
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FY 2002-03
\$750,000



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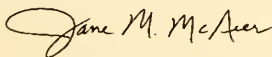
This year, almost 2,400 alumni made a gift or pledge to the School of Medicine totaling \$4.4 million. These record-breaking numbers are certainly something to celebrate, but what's most important is what the money does.

Over 83% of the gifts and pledges went to restricted programs for research, faculty support and scholarships, for example. The Loyalty Fund, the annual unrestricted alumni fund, received \$740,202 in gifts from 39% of UNC medical alumni. This outstanding support makes a real difference in educating physicians.

The donor list that follows includes the names of all alumni who made contributions, (pledges are not included) to any Medical Foundation account between July 1, 2001 and June 30, 2002. Names in bold type recognize alumni who contributed at the \$1,000 level or above. Names in italics recognize alumni who gave \$10,000 or more. Please call me at The Medical Foundation at (800) 962-2543 if you have a correction to this list. Every effort for accuracy has been made.

Continued alumni support has a significant impact on the growth and success of the UNC School of Medicine. Thank you for your generosity and leadership.

Sincerely,



Jane M. McNeer
Assistant Dean and Vice President
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P.S. As you may know, UNC is in an ambitious, University-wide \$1.5 billion — plus comprehensive capital campaign — The Carolina First Campaign — which began July 1999 and ends in June 2006. All gifts and pledges to the Medical School, including the Loyalty Fund and Medical Alumni Endowment Campaign, count toward this important fundraising effort.

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CLASS OF 58

Number in Class: 47
Percent Donors: 43%

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CLASS OF 59

Number in Class: 38
Percent Donors: 55%

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CLASS OF 60

Number in Class: 61
Percent Donors: 41%

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CLASS OF 61

Number in Class: 48
Percent Donors: 44%

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Number in Class: 50
Percent Donors: 72%

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CLASS OF 63

Number in Class: 49
Percent Donors: 41%

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CLASS OF 64

Number in Class: 54
Percent Donors: 24%

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CLASS OF 65

Number in Class: 55
Percent Donors: 31%

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CLASS OF 66

Number in Class: 59
Percent Donors: 63%

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CLASS OF 67

Number in Class: 65
Percent Donors: 57%

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CLASS OF 68

Number in Class: 59
Percent Donors: 46%

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CLASS OF 69
Number in Class: 62
Percent Donors: 40%

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Number in Class: 70
Percent Donors: 46%

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Number in Class: 72
Percent Donors: 35%

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CLASS OF 72
Number in Class: 69
Percent Donors: 55%

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CLASS OF 73
Number in Class: 79
Percent Donors: 30%

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CLASS OF 74

Number in Class: 92
Percent Donors: 35%

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CLASS OF 75

Number in Class: 103
Percent Donors: 31%

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from the president

All of us know these are difficult times with a sluggish and volatile economy and a diminished value in most stocks. And yet it seems fitting during the 50th anniversary of UNC's medical degree program for us to meet the challenge for greater alumni giving to help maintain the quality and national standing of our medical school.

The fiscal year that ended June 30 was a good year in terms of alumni giving, in spite of economic uncertainty. Forty-six percent of UNC alumni made a gift or pledge to either the medical school or hospital for a total of \$4.4 million. Thirty-nine percent of medical alumni made a gift to the Loyalty Fund — our goal was 40 percent — and in doing so, contributed \$740,202, up \$34,000 from last year.

While these figures are impressive, we need to do more by increasing participation in Medical Alumni activities and our own giving. We need to reach out more to our classmates and colleagues and encourage them to become more involved. We should encourage attendance at as many Medical Alumni meetings as possible, including the spring and fall alumni weekends and class reunions. The fall meeting this year will be Nov. 1-2, and the spring meeting will be April 4-6. The classes of 1943, 1958, 1963, 1968, 1973, 1978, 1983, 1988 and 1993 will have reunions during the April meeting. Additionally, I encourage you to get involved with your local area alumni campaigns and Dean's receptions.

The Medical Foundation is emphasizing planned giving and increasing the development of the medical school's endowment funds. The Berryhill Society has been formed to recognize donors who have created a planned gift (for example, made a provision in their will or created a charitable trust or gift annuity) which may offer considerable tax savings. Already there are 139 members of The Berryhill Society, a very good start.

As part of the Carolina First Campaign, the Medical Alumni Association is trying to increase endowments to continue funding its 51 scholarships, despite the rising cost of tuition and other expenses, as well as four teaching professorships and research grants. We need your help in maintaining these existing commitments.

Make it part of your legacy to support our endowment efforts by contributing a 50th anniversary gift to our school through a current gift. And also consider supporting the school in the future by becoming a Berryhill Society member by making a planned gift.

I look forward to seeing you in Chapel Hill during Fall Alumni Weekend on Nov. 1-2.

Ray Hayworth

Ray M. Hayworth, MD '62

We want to hear from you . . .

The *Medical Alumni Bulletin* would like to hear from you about our publication and the stories we publish. Selected letters could appear in print in a new "From Our Readers" page. The *Bulletin* editor reserves the right to edit for clarity and space considerations only.

Please submit your letters to:
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UNC Health Care, 101 Manning
Drive, Suite 6002 East Wing,
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(919) 966-6207 or e-mail
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Anonymous letters will not be published and submission does not guarantee publication. You should include your name, address and daytime telephone number. Addresses and phone numbers will not be published.

Oct. 4-6 - Chapel Hill

Ross Society

Oct. 4-6 - Chapel Hill

Update in Gastroenterology and Hepatology

Oct. 6-9 - Chapel Hill

Promoting Student Success

Oct. 24-25 - Chapel Hill

MMRF

Oct. 30 - Chapel Hill

Norma Berryhill Distinguished Lecture & Reception

Nov. 1-2 - Chapel Hill

Fall Medical Alumni Weekend

Nov. 1-2 - Chapel Hill

Annual Vascular Surgery Conference

Nov. 22-24 - Chapel Hill

Psychiatry Across the Ages: Seventh Annual Symposium and the 19th Annual George C. Ham Symposium

Feb. 14 - Chapel Hill

Women's Issues in Cardiovascular Medicine

Feb. 20-21 - Chapel Hill

Update in Geriatric Practice

Feb. 22 - Chapel Hill

Pain, Addiction and the Law

March 14-15 - Chapel Hill

Herbal Medicine Conference

March 26-28 - Chapel Hill

27th Annual Internal Medicine Conference

April 4-6 - Chapel Hill

Spring Medical Alumni Weekend

For more information, go to

www.med.unc.edu/alumni and

www.med.unc.edu/cme.

Estate Planning Notice

Many individuals would like to make a major gift to the UNC medical center, but cannot commit current assets for such a purpose. Through a will, however, anyone can make a more significant gift than they might ever have thought possible by designating a specific sum, a percentage, or the residue of their estate for the benefit of the medical center.

To provide a bequest, simply include a paragraph in your will naming The Medical Foundation of North Carolina, Inc. as a beneficiary. For example:

"I give, devise and bequeath (the sum of \$ _____) or (_____ % of my estate) or (the residue of my estate) to The Medical Foundation of North Carolina, Inc., a 501(C)(3) created to maintain funds for the UNC medical center with principal offices located at 880 Airport Road, Chapel Hill, North Carolina."

This language creates an unrestricted bequest for use by the medical center when and where the need is greatest, or you may specify that your gift be used for a particular purpose.

For further information on bequests, contact Jane McNeer at (919) 966-1201, (800) 962-2543, or jmcneer@email.unc.edu.

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